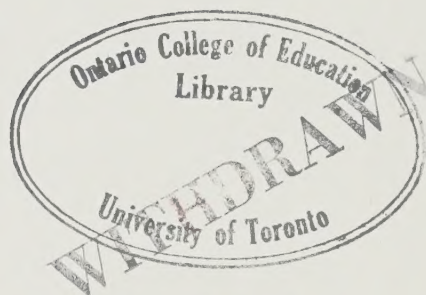





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P R E F A C E

In these fast moving days when changing market conditions, technological improvements, and restrictions in raw materials and shipping, affect employment for large numbers of persons, it has become a matter of major responsibility to guide youth, and older persons too, so that they shall enjoy economic security through approved work suited to their interests, capacities and abilities.

All extensive surveys of youth employment have shown a need for school courses in occupations, and vocational guidance. To make a wise occupational choice from some 500 major groups of occupations and select a life work from more than 2,000 payroll jobs is a task far too difficult, and far too important, to leave to chance.

Counselors in the Armed Forces, employment officers, guidance teachers in high schools and collegiates have relied to a considerable extent, directly or indirectly, on census data for information on job opportunities, trends in employment, and pertinent information concerning the personnel in selected occupations. Of necessity the census reports are not prepared especially for this purpose and contain considerable additional materials useful in other connections. They are so voluminous as to present problems to the average counselor both in ordering pertinent reports and in using the regular volumes.

In the hope that reliable census data will be used more widely this bulletin has been prepared to meet the particular needs of those doing guidance work or conducting vocational information classes. It has made use of selected census figures supplemented with related statistical information from various Branches of the Bureau. Reference is made to additional valuable tables which were omitted due to their length and which may be ordered, where desired, in bulletins obtainable from the Bureau, or volumes available from the King's Printer.

This bulletin was prepared in the Education Branch by Fred E. Whitworth, who wishes to acknowledge the aid he received from the Chiefs, and their assistants of all branches from which he used compiled data. More particularly, the following read parts of the manuscript and offered valuable suggestions: Mr. N. McKellar, Chief, Unemployment Insurance, Dr. O.A. Lemieux and Messrs. A.H. Leneveu, N. Keyfitz, L. Forsyth, and R. Ziola of the Demography Division; Mr. G.S. Wrong, Chief, Transportation and Public Utilities; Mr. F. Rashley, Manufactures; Mr. C.J. Garrard, Construction, and Dr. J. E. Robbins, Chief, Education Branch. Mr. J. W. Delisle prepared the charts for publication.

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CANADIAN CENSUS OCCUPATIONAL DATA FOR COUNSELLORS

PART I.

1. INTRODUCTION

Every year some 150,000 more young Canadians search for available openings in the 20,000⁽¹⁾ or more different types of vocations making up our occupation pattern and attempt to adjust themselves to them. Comparatively few of these young people know either what they want to do or what they are capable of doing well. Many of them have no clear-cut ideas of a vocational future -- only day dreams and wishful thinking. Their greatest need is for satisfactory occupational adjustment which may be affected more readily where adequate occupational information and proper guidance are provided. Lacking such, there has been a tendency for these young persons to accept temporarily the first job offered and to keep moving from job to job while they mature. During times of normal employment most of them lose two years or more in periods of unemployment before they become somewhat firmly anchored to some one occupation.

Of the 100,000 boys, to judge by the 1941 Census, 49 p.c. are from the farms and hamlets; 3 p.c. from villages and towns of less than 1,000; 29 p.c. from urban areas of from 1,000 to 3,000 and 19 p.c. from town and city areas of 3,000 and over. Many farm youth are classed by the census as "no pays" while helping at home or doing odd jobs until such time as they make the break from farm to urban area. Comparatively few of the urban boys will gravitate towards the farms except for harvesting or other casual employment. Instead, many of them become delivery boys, ushers in theatres, filling station attendants, etc. and move around in these jobs until they are accepted as grown up. During such period they will probably have been employed for sufficient time in some one type of work to be classed as experienced and to gravitate towards job opportunities in that occupation when out of work. That they can do such work passably well in most cases follows from the trial and error methods used in selection; but it does not follow that they are more suited to that occupation than to some other. All experiments conducted on groups of employees have indicated considerable vocational maladjustment.

In part, as a result of this vocational maladjustment, but also because the war demanded more of each worker than was expected previously, the people of Canada have been acutely conscious of the need for vocational guidance, counselling and economic planning in order to absorb all available workers and rehabilitate returning veterans. There is a growing feeling that the present need is greater than at any previous time. Coupled with this is the knowledge that although the means now at our disposal allow for a more scientific approach to the problem there is still a dearth of available data about Canada's economy which can be used as background.

This report is intended to bring together certain available materials and direct attention to other government publications already in print. Later bulletins must bridge the many gaps and new techniques provide factual data which are at present desired but not available.

(1) This number is arbitrary. For convenience in tabulation, etc. the Census used between 200 and 250 categories. The Social Analysis Branch has proposed a classification of more than 20,000 divisions while the U.S.A. Dictionary of Occupation Titles contains about 18,000.

Although this report is primarily directed towards those who are interested in vocational guidance and counselling it may prove useful to those interested in understanding post-war Canada. From available data one cannot but be impressed with the continuity of trends and the importance of realizing what these trends mean. A knowledge of these forces should be useful in understanding and attacking certain of our present problems which are so vital that they must not be overlooked.

Pleas for specific information related to demand and supply in various occupations or professions are heard from one end of Canada to the other. "Tell us the number of doctors, dentists, engineers, mechanics, etc., needed during the next ten years and we'll guide high school pupils towards those occupations". Often the requests are similar but for specific areas. Unfortunately, such information is not forthcoming nor can it be obtained from historic data. The best that can be done is to plot trends in the past from which probable future demands may be indicated. The accuracy of such forecast must depend largely on the number of factors taken into consideration and the relative weights given these. Functional relationships must not be imagined where they do not exist, nor where a few neglected factors may alter or upset all calculations. Even a casual inspection of the history of Russia, Italy, Germany, Turkey, etc., during the twentieth century bears this out.

In Canada the Great Wars and major depression of the thirties presented certain unprecedented, unpredictable situations. Technological advance, immigration or social legislation, while not so disrupting, are other factors which could disturb most any prediction. The interdependence of modern nations and consequently the reflection of conditions outside Canada within her boundaries introduces a margin of error too great for any but the broadest generalizations. Such data as are presented are indicative and useful for an understanding of the present or the prediction of the near future. No serious attempt has been made at forecasting in this report.

The first section is given over to a short discussion of certain broad impersonal influences of the economic system. Although these may appear somewhat abstruse and distant to one interested in job selection, yet their influence is felt by everyone. Furthermore, they are basic forces interacting in a more or less orderly way to form the economic framework within which individual decisions must lie.

The second section presents data on the labour force of Canada. Pertinent information relates to composition, unemployment, income, age, mobility, and occupation trends among the workers. Some information is given on women workers, occupations in the larger cities and finally, a social-economic grouping of workers is offered as an additional classification.

The third section is given to a brief discussion of the various occupation groups as used in census compilations such as agriculture, manufacturing, transportation, trade and finance, service and clerical workers.

The data used are from the Demography Branch and reports of other branches of the Dominion Bureau of Statistics supplemented in a few instances by publications of the Department of Labour, Wartime Information Board, etc.

2. OCCUPATIONS AND INDUSTRIES

It will probably be found difficult to keep from confusing the terms occupation and industry as used in these pages unless a clear idea of their use is obtained at the beginning, particularly when such terms as agriculture, manufacturing, trade, etc. are used in both the industrial and occupational classifications.

The term gainful occupation as defined for the census refers to one "by which the person who pursues it earns money or in which he assists in the production of marketable goods". Unemployed persons at the time of the census report the last job at which they were employed and if they are actively in search of work. Youth of 14 and up who do not attend school but assist their parents are classed as "no pay" if helping in the productive work of the farm or business. Daughters helping in the home are not considered to be gainfully employed any more than are their mothers.

When referring to occupations the term "manufacturing" includes only those who are actually engaged in processing, that is repairing or manufacturing, irrespective of the industry employing them. On the other hand those classed under manufacturing in the industrial division may be engaged in processing, transportation, trade, labour, etc. For example in the manufacture of flour and grain products there will be a wide variety of occupations such as: owners and managers, foremen, bakers, millers, coopers, machinists, boiler firemen, carpenters, truck drivers, commercial travellers, accountants, stenographers, labourers and some dozen others. What is true of manufacturing is also true of trade, transportation, commerce, etc. Labour, however, is used as a special occupational classification but cannot be included as an industry as it is always associated in some way with one of the industries.

While occupations are represented in many industries there is considerable difference in the extent to which various types of occupations are distributed throughout the major divisions and subdivisions of industries and services. Such occupations as clerical, truck drivers, and caretakers, for example, are widely scattered throughout the range of industries. Other occupations such as weavers and spinners are employed in only a few industries, while still others such as papermakers, flour millers, street car operators, etc. are wholly confined to one industrial division. Such information is valuable for job selection although it does not tell the whole story. It indicates that truck drivers or clerical help in need of employment might consider all industrial groups and most sub-divisions while flour-mill operators or street car conductors are more restricted in their respective fields and must apply to flour mills or street railway corporations exclusively unless they wish to change occupation.

It does not follow, however, that occupations which are widely scattered throughout industry will ensure steady employment. Such evidence as was obtained from the 1931 census indicated that many of the occupations which were not widely scattered were attached to relatively stable industries with a low rate of unemployment. On the other hand where unemployment did occur it was usually of longer duration. In fact it seemed fair to conclude that in a given economic area wage-earners engaged in occupations common to many industries should for the most part show less long-time unemployment than wage-earners in occupations found in only one or two industries.

In Volume VII, Occupations and Industries (pp. 764-897, Table 58) of the 1931 Census, the gainfully occupied, 10 years of age and over, are distributed by industry, specified occupations and sex for Canada and the provinces, 1931. In this table which cross-classifies industry by occupation, the various occupations which are found in the industries listed are given whenever more than twelve were found in the industry. Despite some few inconsistencies which were inevitable and crept in due to the replies of the individual, checking by the enumerator or the inherent difficulty of attempting to classify all jobs in Canada in the categories specified by the census, this table is valuable in giving a picture of the occupational composition of the many industrial sub-divisions. The number of occupations listed for the industrial sub-divisions varies widely. Agriculture has 11

sub-industries such as: bee-keeping, with occupations: apiarists and farm labourers and flower; seed culture with 14 occupations listed and mixed and general farming with 10 occupations. Similarly other industrial divisions employ workers in a few occupations or as many as 60 and up.

In the same table the number of employees are tabulated for Canada and the provinces. These indicate not only the number of employees in the various occupations associated with the various industries but also give some idea of where these positions might be found.

In 1941 similar information was collected by census enumerators. Three tables were prepared which may be considered as complementary to the one for 1931 mentioned above. They contain comprehensive data on the scope of employment throughout industry afforded to persons in a wide range of occupations.

Table I is a summary table showing how those gainfully occupied in the major occupation groups were distributed by number and per cent throughout the major divisions and groups of industries and services in 1941.

Table II is somewhat similar except that it lists the individual occupation classes and shows number and per cent reported in each of these distributed among the major industry groups for Canada, 1941.

Table III lists the individual occupation classes and gives for each of these the number of males and females who were employed in each industry at the time of the 1941 census. It may be used to discover the relative importance of the different industries as sources of possible employment for persons in any of the occupations listed. It also yields some idea of the range of occupational opportunities or variation in work opportunities. For example dentists are found almost exclusively in service although a very few are found under education, manufacture and trade, whereas cooks are widely distributed with many to be found in primary occupations - especially forestry and logging; some in manufacturing and construction; a fair number in transportation and a large number throughout service. Similarly guards and caretakers, janitors and sextons are widely distributed. Dental work would be similar wherever found while cook's work or that of guards, caretakers and janitors, can vary considerably.

Labour Force Bulletins (x)

These quarterly bulletins of the Dominion Bureau of Statistics summarize the results of sample surveys based on a carefully selected one per cent of the population. Selection of the unit areas and households included is based on a complex, scientific sampling design ensuring that all such industrial and service areas as dairy farming, wheat farming, mixed farming, industrial divisions, cities, etc., are included in approximately 100 primary sampling units. In the cities selected blocks were chosen while outside the cities the households selected represented proportionately the primary sampling unit classification. Persons in the armed forces or in institutions were omitted as were those on Indian Reserves or remote and relatively inaccessible areas.

The complete tables will shortly be available in the Census Volume on Occupations and Industries. At present they are obtainable as Distribution of Occupations by Industry, a rotaprint report available from the Dominion Bureau of Statistics, Ottawa, 75 pages, 75 cents.

(x) Labour Force Bulletin, Dominion Bureau of Statistics, 25 cents.

Tables in the report give the number employed, unemployed, members of the working force whether employed or unemployed and non-workers. These are listed for age groups, industrial divisions, geographical locations, etc.

The first sampling was made November 11-17, 1945 and will be followed by other samplings quarterly. The bulletins reporting the results from these should become increasingly valuable to teachers of occupations and counselors as comparative data become available.

PART II

1. EXPANSION OF THE CANADIAN ECONOMY

Canada has undergone noteworthy economic advance since 1867. Our present economic system has developed with great speed through a process marked by continuous change, sometimes slow, sometimes startlingly rapid. Moreover, there is good reason to believe that the process of development has by no means reached completion but will continue with renewed vigour in the post-war period.

Perhaps the best single index of this expansion is obtained from total income produced, measured in dollars of standardized buying power. Unfortunately estimates are available only from 1911 to 1944. Increase in per capita income gives a better idea of relative increase in production. The two together give a fair picture of the progress made in the Canadian economy.

Behind this growth are the hidden factors of science and technology. Such dynamic expansion is noticeable, for example, in the field of agriculture where farms increased in size with each producing more and better varieties. More food was provided for home consumption and export while improved methods of preserving, processing and transporting allowed for the movement of food products over long distances at comparatively low cost. Improved machinery enabled each farmer to work more land. For a time farmers and farm helpers released from the farms were mainly absorbed in placing more land under cultivation. Later, many of them gravitated to the urban areas as the expansion of farming areas slowed down. Improved scientific methods had shifted them off the farm.

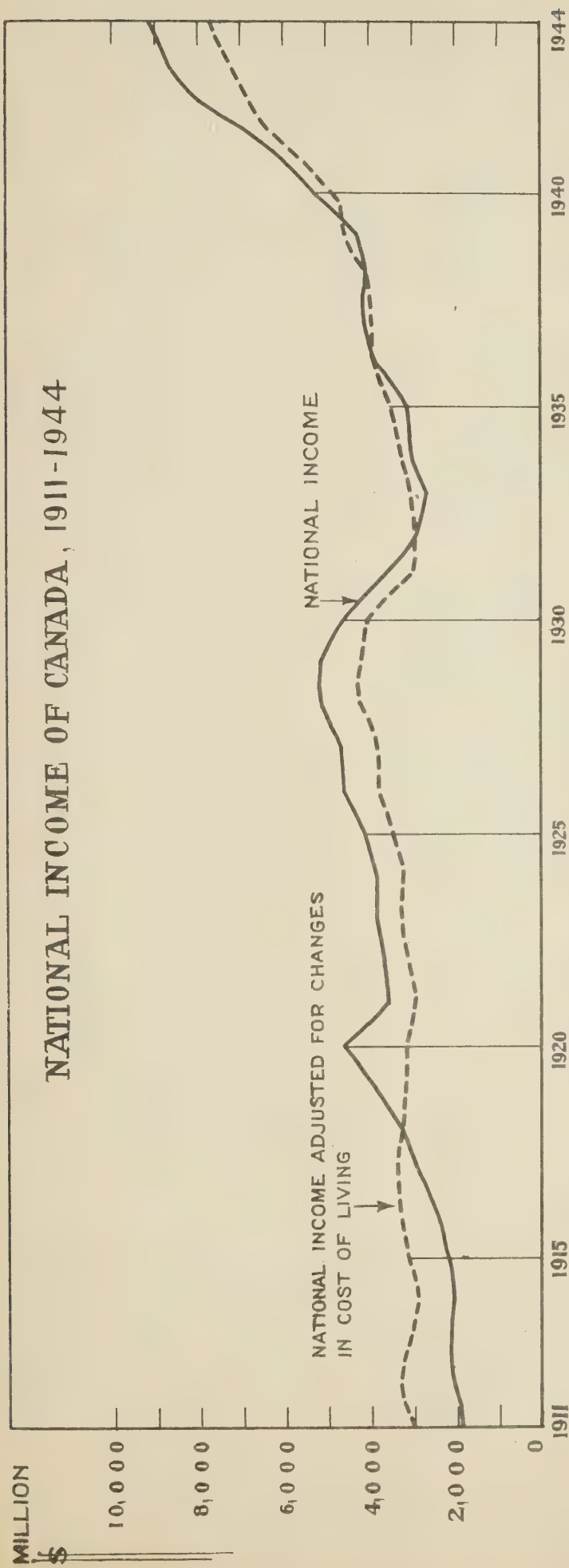
As improved transportation facilities allowed for the movement of raw materials to central points for processing and distribution the factory system came into being and urban sections developed. Offsetting the pull of the far frontiers which beckoned for young men to settle and carve out a home for themselves, was the pull of the cities which provided a real challenge by promising an opportunity to wealth and social prominence. The movement to settle on new land, while not consistent, remained firm for some time, then decelerated as the choice land was homesteaded; notwithstanding an occasional sporadic exodus of settlers to new areas, such as the Peace River District, when farms seemed run down, when crop failure followed crop failure, or when a depression hit the cities.

Meanwhile those who entered the cities found a golden opportunity for the accumulation and investment of capital. This was facilitated by natural resources ready for exploitation and concomitant expansion of land area while increasing population provided greater markets.

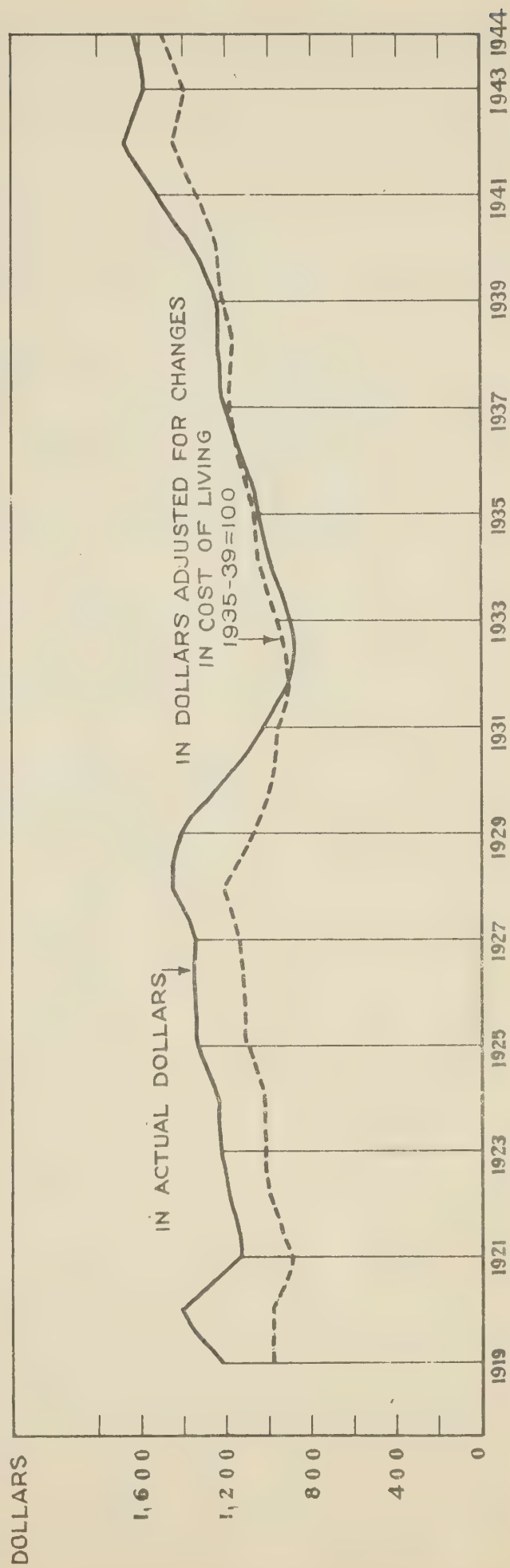
Hand in hand with this expansion was the increased use of power-driven machinery, the assembling of large labour forces, the rapid accumulation of capital, and the development of techniques of management. To conduct the financial business involved in, or resulting from this volume of trade, there grew up an elaborate system of credit relationships which greatly increased the interdependence between the separate units of the economic order.

Most of the industrial growth has taken place since the middle of the Nineteenth century. In Canada it was off to a comparatively slow start during the latter part of the Nineteenth century but gathered momentum and made rapid strides during the last few decades. This development, now viewed retrospectively, appears extremely rapid and has by no means reached an equilibrium or halt. Employment during the period has fluctuated considerably, with occasional long and

NATIONAL INCOME OF CANADA, 1911-1944



NATIONAL INCOME PER GAINFULLY OCCUPIED, 1919-1944



wide variations from the usual trend, as has industrial activity and the general price level. Periodic booms have been followed by crises, recessions and depressions. All things considered, the depression of the thirties was the most pronounced of these and of longest duration and the succeeding rise which resulted in an all-time high is associated with the second world war.

2. NATIONAL INCOME^x

Our economy is primarily the method by which Canada's twelve million people make a living and our national income is the aggregate of monies at the disposal of Canada's population.

It requires neither statistics nor argument to show that Canada's economy has expanded greatly since 1867. Charting the rate and extent of growth is another matter. Total national income is commonly used to indicate degree of economic expansion. Compiling this is an extraordinarily difficult task and no attempt to do so was made until comparatively recently. Figure 1 plots the estimated national income for Canada from 1911 to 1944, and the same estimates adjusted to make allowance for changes in purchasing value of the dollar as measured by the Cost-of-Living Index.

While the latter smooths the curve and reduces the over-all variation, both graphs show a trend towards an increase in total income for the period considered. The latter shows an increase of more than 2.5 times between 1913 and 1944 while the former indicates more than a fourfold increase between 1911 and 1944.

That this increase is not wholly due to an increase in population may be discovered from Figure 2 which gives the national income per gainfully occupied in dollars adjusted to make allowance for changes in the cost of living index. While the period from 1919 to 1944 is relatively short considering the irregularity of the index, the same trend upward is observable indicating that each gainfully occupied individual contributes more to the national income today than in 1919. This added efficiency is largely due to technological advance.

To supplement these data Figure 5 shows total exports and imports in dollars for Canada from 1867 to 1945. Since external trade represents but a part of the income of Canada this series can be used as an indication of relative internal prosperity only insofar as its fluctuations correspond to those of total income. Its movement from 1919 to the present. Figure 5 may be compared with that of National Income, Figure 1, for goodness of fit. Despite time lag and difference in intensity similarity of trend for both is plainly observable, so that, lacking a more complete record, external trade may be used to give some indication of trend from Confederation to the present.

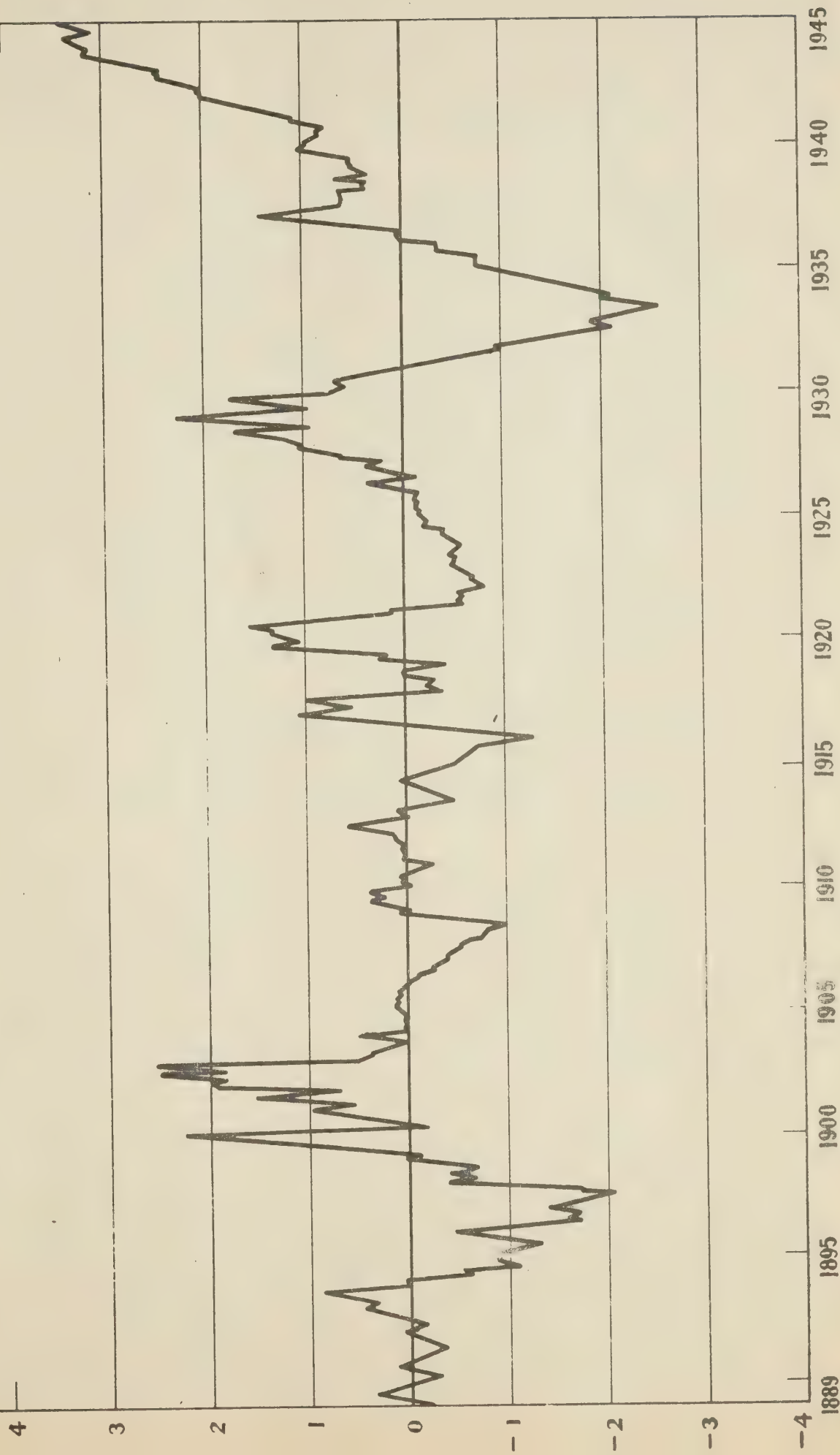
This chart shows a fairly steady, if somewhat erratic, increase in trade from 1867 to 1943. It provides a basis for several beliefs which have greatly influenced our outlook on life and even our economic structure. Among these is the cherished notion of progress through a never-ending process of change. Interruptions before 1930 were considered temporary setbacks which could be explained as part of a cycle; the forces of growth would soon push forward again. Before 1914, available data lent itself to such interpretation so well that it seemed almost a law of nature.

^x Data from National Income of Canada, 1919-1938, Dominion Bureau of Statistics and S.B. Smith, Chief, Business Statistics Branch, Dominion Bureau of Statistics, Ottawa.

Chart 3 .

INDEX OF ECONOMIC ACTIVITY IN TERMS OF STANDARD DEVIATION
TO THE LONG TERM TREND

1889-1945



The general trend in the years previous to 1930 is unmistakably upward although conspicuously irregular. Yet there were marked depressions during that period. To give some indication of the severity of the recessions in economic activity as well as the peaks reached by the forces of expansion, Figure 3 is given. The relative severity of each of the depressions: the late nineties, 1908, 1921 and 1931 may be easily observed from this figure. Above the line may be seen the boom periods when economic activity was at a peak.

A casual survey of this chart indicates a great deal of irregularity, the intensity increasing with the years. Fluctuations within the year are observable as well as those which lasted for several years. Radical changes from a high peak to a low depression are not uncommon. (The trend towards expansion noted in the previous charts should be kept in mind in interpreting this one.)

When it is considered that hundreds of thousands of additional workers were absorbed during this period without a reduction in average production some ground is seen for the optimistic view generally accepted -- at least before 1930. Two other considerations stand out from this chart. First, the relative depth and extent of the depression of the thirties. During this recession, which lasted the best part of ten years, national income, adjusted for changes in the cost of living, dropped in 1932 to the same level as in 1914 and 1921. The seriousness of this is best realized when it is considered that the population had increased and the standard of living was higher in 1929 than in 1920 and 1913. Getting along with much less in a relatively prosperous era and district magnifies the lowered standard of living more than reduction to the same level in a less progressive and mechanized era. The luxuries of a previous generation had become necessities for a corresponding standard of living at the later date.

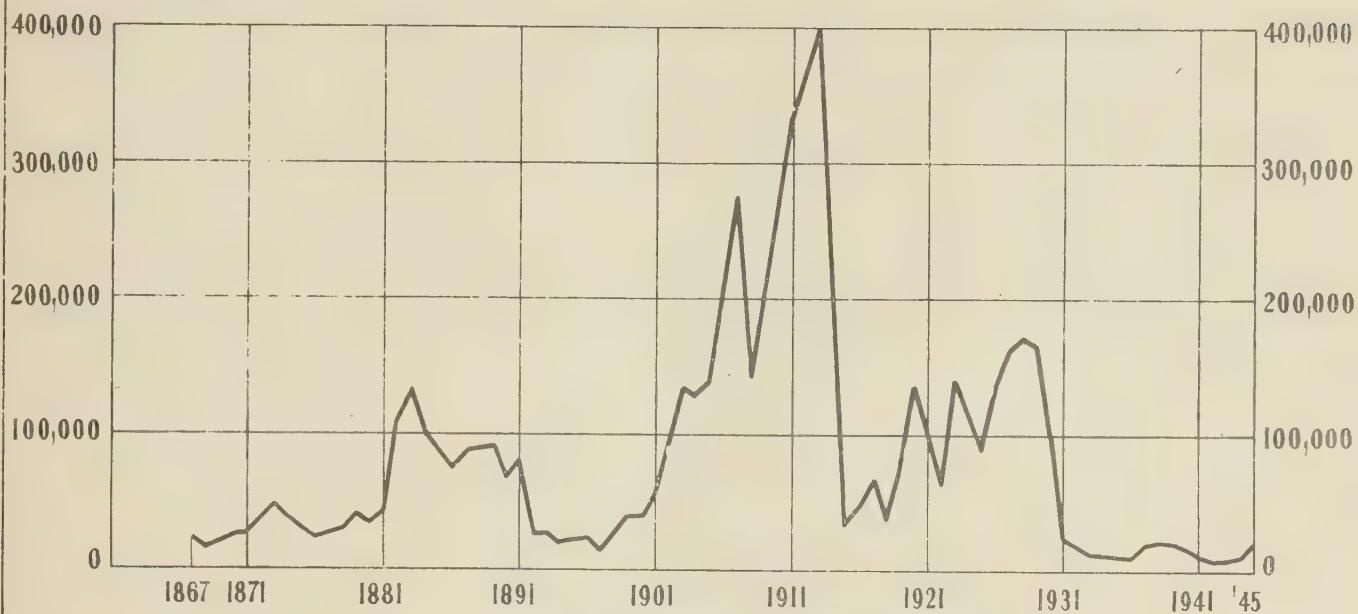
It must further be recalled that the cost of living index in itself provides some measure of the relative prosperity of the country at any selected period. Adjusting a table to take into consideration changes in the cost of living improves the picture insofar as relative purchasing power is concerned, but tends to cover up real variations which are important for other considerations, such as exchange value outside the country, value of pensions, fixed sums, interest, etc.

The same upward trend for the period is shown in Figure 2 indicating that the average dollar income per gainfully-occupied person reached a long-time low in 1933. However, when the adjusted graph is considered although the chart indicates that the minimum average dollar income was reached in 1933, the minimum average purchasing power was lower both in 1932 and 1921. Again it should be kept in mind that the number of unemployed in 1933 was particularly large (see section on unemployment). The unemployed were not included in the data from which these averages were computed. If they had been the per capita income would have been reduced perceptibly. In brief it appears that fewer were employed and those employed were paid less.

To the present there has been no adequate explanation to account for the major depression of the thirties. Before 1914 industrial development seemed explainable in terms of business cycles -- depression, recovery, prosperity and decline, with each step growing out of the previous one. Then came economic phases dominated by the First World War, post-war adjustment, the "New Era", prosperity and the Second World War. Before 1914, business had passed into a depressed phase but it soon showed an upturn to meet war needs. Business activity kept up fairly well until war-time prices began to crumble, then the severe depression of 1921 set in. By the middle of the 1920's recovery was complete and the "Bull Market" boom set in, in 1927-28 with excessive speculation. Otherwise

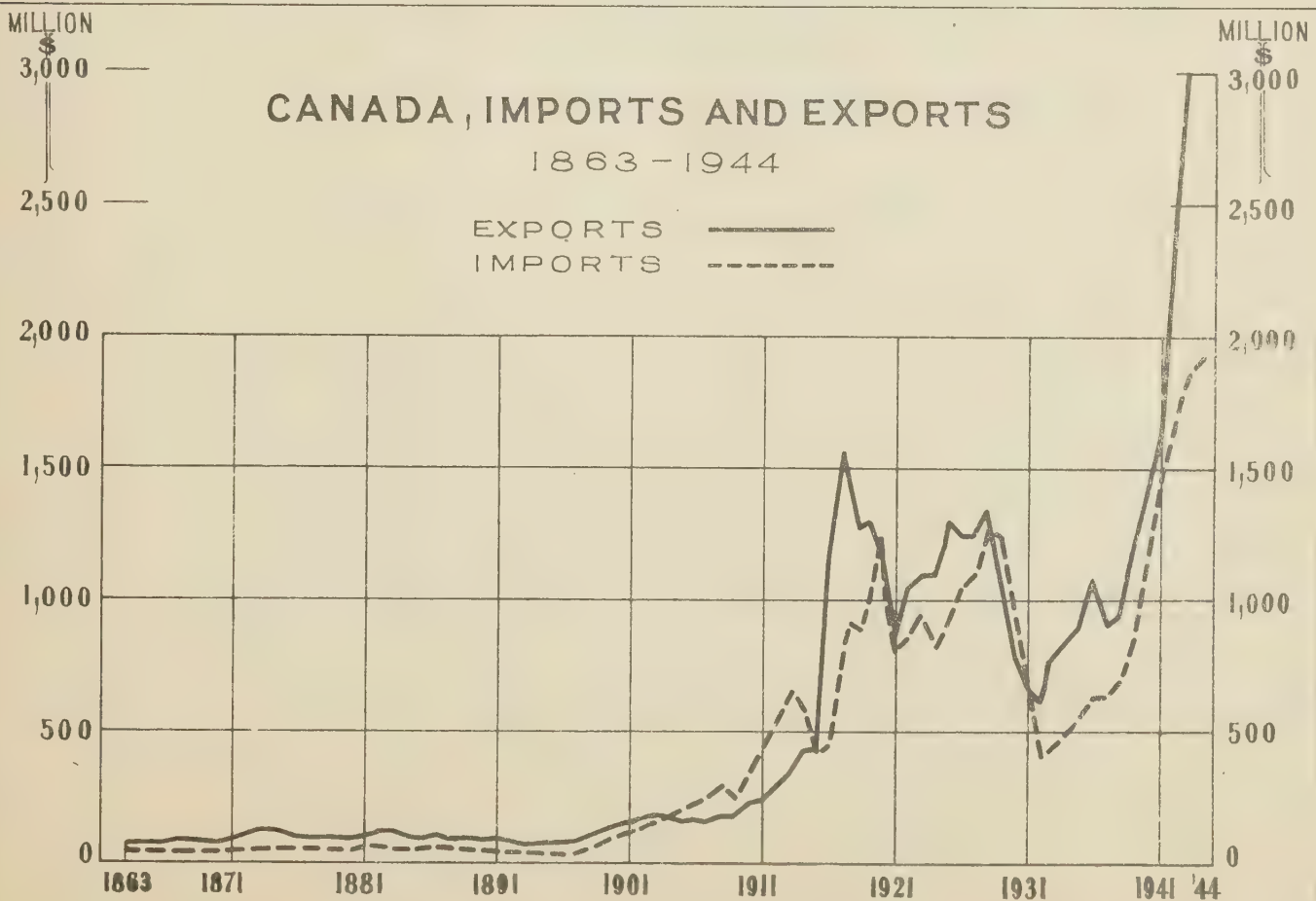
Charts 4-5

IMMIGRATION INTO CANADA, 1867-1945



CANADA, IMPORTS AND EXPORTS 1863-1944

EXPORTS ———
IMPORTS - - - - -



the period was remarkable for its improvement in public and private utilities such as greatly improved automobiles and hard surfaced roads. Farmers prospered and city dwellers erected new houses at an unprecedented rate. General prices were increasing but security prices were rising to fantastic heights. The collapse came and in a few short months millions of speculators in North America lost all their holdings. Yet the seriousness of the situation was not realized although it was recognized that this was not a local depression but part of a world-wide condition.

Business activity had fallen back to the 1921 record low which had been considered the worst setback in eighty years. Experts predicted an early upswing but by 1933 the situation was black as ever. The bank holiday in the U.S.A. and crop failure due to drought conditions in Western Canada and the Western United States with lack of markets in Europe added to the depressed economic conditions.

There was no quick upturn, instead business began the slow climb back. Planned government spending by the United States government aided conditions somewhat. However, when it was temporarily curtailed in 1938 private investors were not ready to take over and the government entered the picture again. This was the condition when war broke out in Europe in 1939. War demands then provided the necessary incentive to business activity which passed the 1928-29 high and started on towards new heights. Had not the government erected a price ceiling including stabilization of wage rates it is impossible to estimate what might have happened to production, prices, etc. As it was, the country as a whole had reached unprecedented heights of production and prosperity by the time the war ended.

3. POPULATION GROWTH IN CANADA^x

Density of population is in itself some indication of the productivity and development stage of a nation. Canada is a relatively new, sparsely settled country with many natural resources not yet tapped. Her land resources point to room for expansion although there is little agreement among authorities as to the total population she could support. The majority of her present inhabitants from Atlantic to Pacific are settled within a few hundred miles of the Canada-United States border.

The density of Canadian population in 1941 was 3.32 per square mile. Exclusive of the Northwest Territories, it was 5.74. It varied considerably from province to province which was to be expected considering range of latitude, rainfall, waste land, etc. Prince Edward Island was most densely populated with 43.5 people per square mile followed by Nova Scotia and New Brunswick, while British Columbia was last with only 2.3 persons, trailing Alberta, Saskatchewan and Manitoba. Ontario and Quebec came in between with 6.4 and 10.4, respectively.

No comparison of the above figures can be made which is indicative of whether or not the provinces are over-populated or under-populated at the present time. Similarly a comparison of Canadian population per square mile with that of other countries is interesting, but should not be construed to mean that all countries should be expected to support any set number of people per square mile. Australia, for example, with 2.4 people per square mile is less densely populated than Canada. Otherwise all countries of Europe, Asia, South America, etc., are more densely populated. Among the most densely populated countries of Europe in 1942 were: The Netherlands, 721.2; Belgium, 711.1 and the United Kingdom, 507.

Increase in Canadian Population Since Confederation.

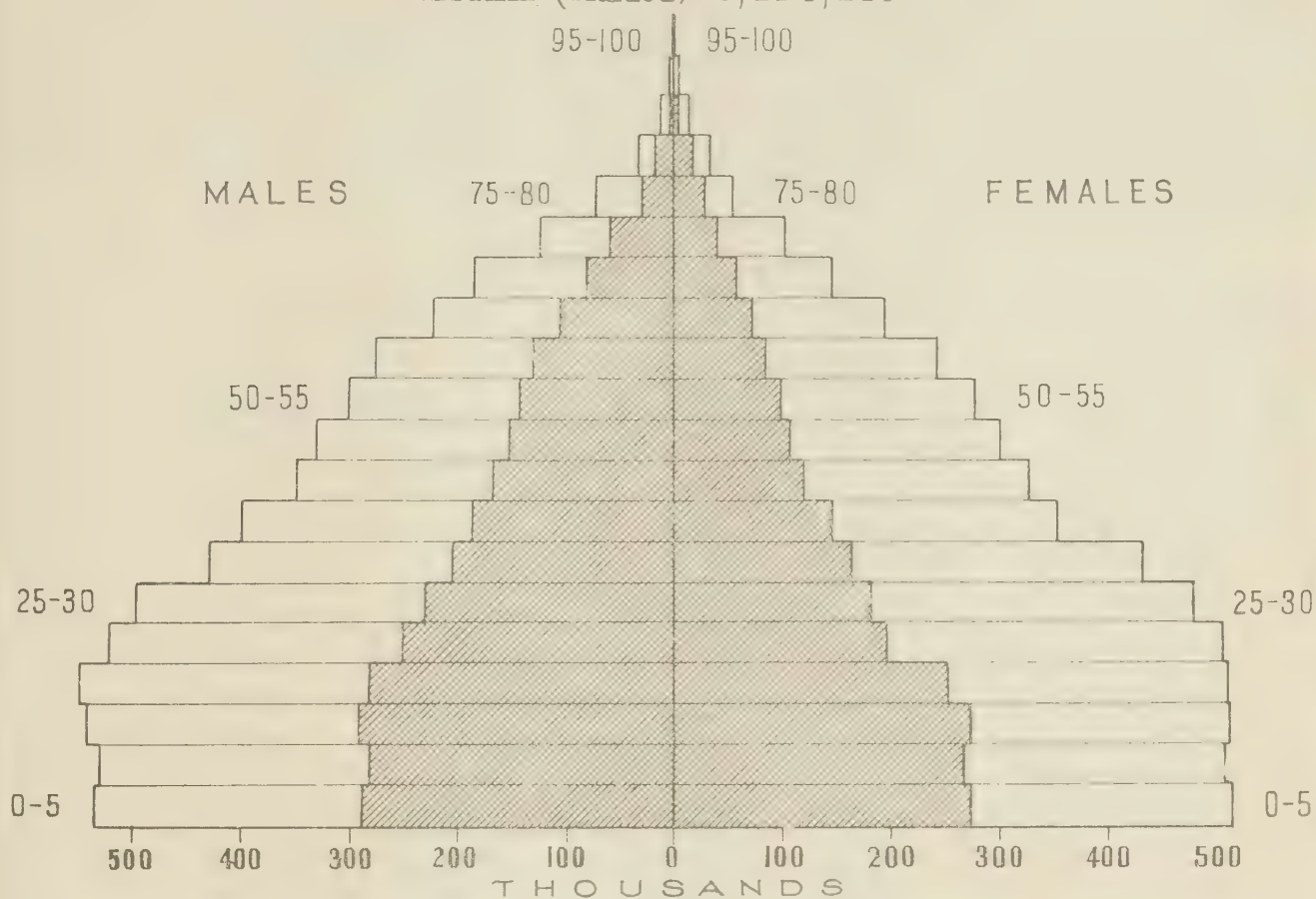
Comparative census data yield a reasonably comprehensive picture of population growth from the first Canadian census, 1866 to the present. During the

^xData from Census Publications, Dominion Bureau of Statistics, Ottawa.

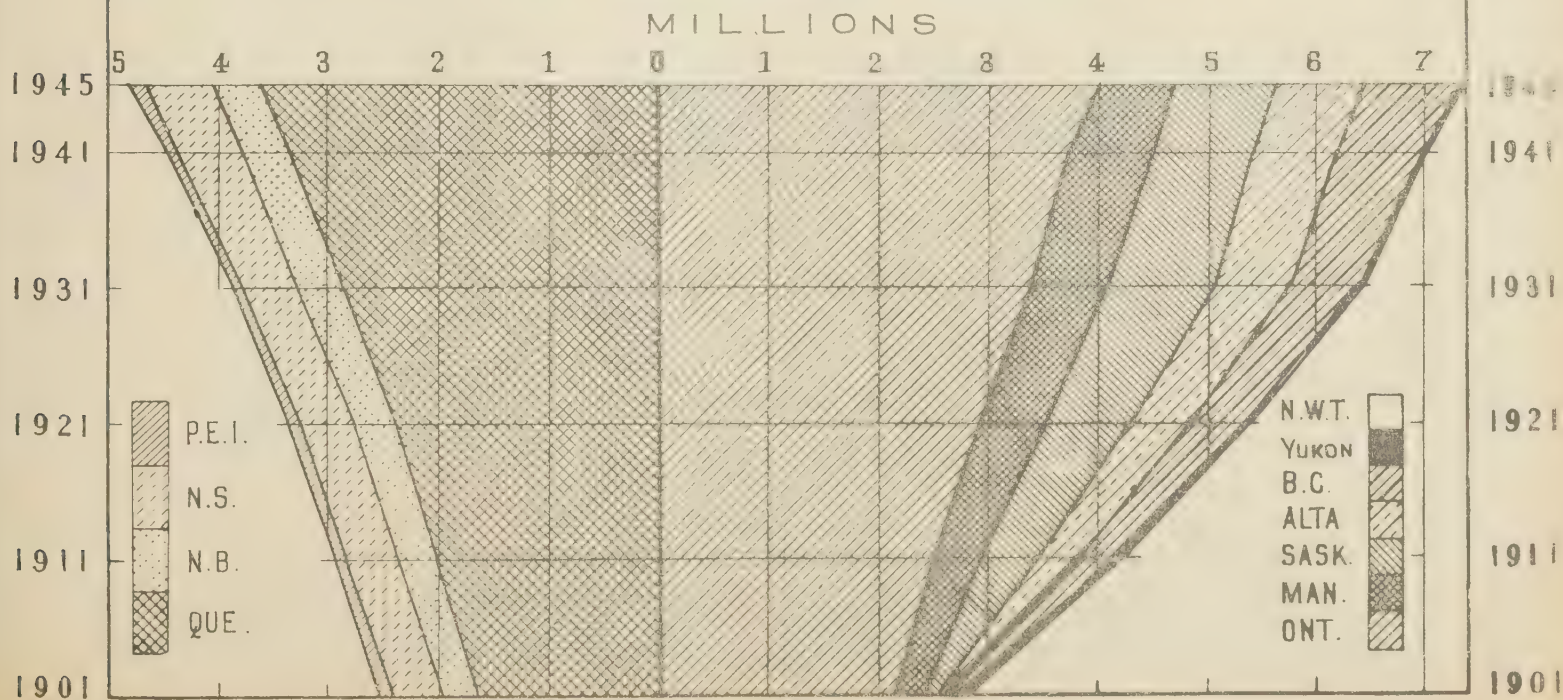
TOTAL POPULATION OF CANADA AND RURAL POPULATION

1941

TOTAL 11,506,655
RURAL (Shaded) 5,254,239



POPULATION OF CANADA BY PROVINCES, 1901-1945



period the total population increased from 3,125 exclusive of the 102,350 Indian and Eskimo population to 11,506,655 inclusive of 118,316 Indians in 1941. This was due to natural increase and immigration, mainly from Europe. By the beginning of the twentieth century the population had reached approximately 5,400,000. During the next thirty years it almost doubled. Of this total increase, immigration had numbered about 1,800,000^x during the first decade of the twentieth century. During the next decade immigration was interrupted by the First World War which affected Canada's population both directly and indirectly. It affected it directly in that 60,000 Canadians died overseas and some 20,000 were discharged in England. About 50,000 more of all ages died as a result of the influenza plague which followed the war. In addition to this many recent immigrants returned to the mother country to join the armed forces there and did not return, and many enemy nationals left for the U.S.A. before that country entered the war. Despite this, the Canadian population increased by about 21.9 p.c. from 1911 to 1921.

During the next decade natural increase and immigration added 1,325,000 and 1,509,000, respectively, while emigration reduced this increase by 245,555.

The 1941 census placed the population at 11,506,655, an increase of 10.89 p.c. for the decade. This decade had included a severe prolonged depression and the first years of the Second World War. Government regulations as well as economic necessity restricted immigration during the period. The increase shown was due to the still favourable birth and death rates although the birth rate showed a reduction of about 7 p.c.

Figure 6 charts the population from 1867 to 1941 in millions, and Figure 7 pictures the increase in population by provinces 1901 to 1945. Per cent increase for the same period by decades is given in the following statements:

Table 1. Per cent Increase in Population by Decades, 1871 to 1941

1871 - 1880	17.23 p.c.
1881 - 1890	11.76 p.c.
1891 - 1900	11.13 p.c.
1901 - 1910	34.17 p.c.
1911 - 1920	21.94 p.c.
1921 - 1930	18.00 p.c.
1931 - 1940	10.89 p.c.

Table II. Percentage Change in Population in the Provinces, 1871 to 1941^{/1}
and Number of Inhabitants Per Square Mile

	<u>Percentage change</u>	<u>Population per square mile</u>
Prince Edward Island	1.09	45.52
Nova Scotia	49.03	27.86
New Brunswick	60.16	16.65
Quebec	179.63	6.36
Ontario	133.68	10.43
Manitoba	2,792.60	3.32
Saskatchewan ^{/1}	881.48	3.77
Alberta ^{/1}	990.03	3.20
British Columbia	2,156.36	2.28
CANADA	211.90	3.32

^{/1} Percentage change for Saskatchewan and Alberta is for the period 1891 - 1941.

^x See Canada Yearbook, 1945 -- pp. 168.

Canada's Population as Rural and Urban

In the colonization of Canada the fishing era which was comparatively unimportant, gave place to fur trading, while efforts were directed towards the formation of settlements. In turn fur trading was largely replaced by farming, manufacturing and trade. As farm area expanded aggressive and alert business men amassed capital at an enviable rate. This encouraged a movement towards urban areas and also brought on periods of speculation during which many speculators, whose enthusiasm got the better of their judgment, suffered great losses. The trend, however, towards urbanization continued and can be observed from census to census.

The line of demarcation between rural and urban areas is arbitrary. Farms shade over into hamlets which verge into villages and so to the megalopolitan areas. The census draws the rural-urban line between hamlets and incorporated villages.

By 1941, 32.3 p.c. of Canada's population dwelt in the twelve largest cities. Another indication of growth in the cities is found in an increase in the number of cities with populations of 50,000 or more from 11 to 15 between 1921 and 1941, and an increase in total population of such cities from 1,995,347 to 3,153,941, an imposing increase even while making allowance for the inclusion of the 1921 population of the four new cities added.

Table 3 gives the number and percentage of the population in rural and urban areas from 1901 to 1941. During the period the rural population increased by only 53 p.c. while the urban population more than tripled or increased by 205 p.c.

Table 3. Rural and Urban Population of Canada for Census Years from 1901 to 1941

Census Year	Rural	Urban	Rural p.c.	Urban p.c.	Cities 30,000+	Cities No.
1901 ...	3,357,093	2,014,222	62.50	37.50	-	
1911 ...	3,933,696	3,272,947	54.58	45.42	-	
1921 ...	4,435,827	4,352,122	50.48	49.52	1,995,347	11
1931 ...	4,804,728	5,572,058	46.30	53.70	2,798,618	14
1941 ...	5,254,239	6,252,416	45.66	54.34	3,153,941	15

Implications of this trend towards urbanization are observable in percentages in various occupations. Indirectly it affects production by changing wants due to differences in the ways of living. This in turn affects job opportunities, external relations, etc.

A more direct affect, however, is observable. More people are living in cities as time goes on and the newcomers typically assume the city rates of fertility. In Canada this rural-urban differential in population is still evident although there is some indication that with increased mechanization a higher average level of living and increased schooling, it too will disappear. The new Canadian birth-rate would become the same as the lower urban rate.

Birth Rate

There has been a general trend towards a lower birth rate in most countries of Europe and North America. Falling birthrates have been followed by alarm in many European countries where it was realized that population growth had come to a full stop. In the United States many students of the subject consider that this

condition will likely be reached sometime between 1960 and 1980 and the prospects for changing this trend through immigration are none too promising.

From 1921 to 1937 the crude birth rate for Canada dropped from 29.4 to 19.8 per thousand population. Since the outbreak of the war, birth rates have risen sharply in most of the allied countries. In Canada this is observable in birth rates of 22.2 and 23.4 in 1941 and 1942, respectively, rates which are quite satisfactory from the viewpoint of maintaining the present population, not considering war losses, etc.

Canada appears exceptional in that her birth rates are higher than most civilized countries. But it must be borne in mind that Canada is still a young country with her frontier being pushed farther back and urbanization a comparatively recent trend. Only since the 1930's has much thought been given to limits of expansion.^x Furthermore, the question of immigration looms large. The entrance into Canada of many young men from Europe anxious to make homes for themselves could influence the birth rate favourably for some time.

Influence of Size of Family on Population

From the viewpoint of replenishing the population of Canada, childless families (which form 31.4 p.c. of the total) add nothing. One couple with ten children contribute as many new citizens as ten families with one child each. Although there are fewer large families than families with one or two children, they are relatively more important from the viewpoint of continuing the race. In Canada, one-fifth of the future population should come from families having seven or more children and over half of the population will come from the quarter of the families rearing four or more children, to judge by 1941 Census data.

Considering rural and urban families it was discovered that the rural areas with 42 p.c. of the population produced 51.5 p.c. of the children. The urban areas with 58 p.c. of the population accounted for 49.5 per cent of the children. The average number of children per farm family was 2.2 as against 1.6 for the urban family. The other rural areas fell between the farm and city. Similarly about half of the farm children grew up in families where there were three or more children whereas only slightly more than one-quarter of urban children belonged to families having three children or more.

Nor were the offspring found to be equally distributed among the families in various occupations. Fertility was considerably higher among such primary occupational groups as hunters and trappers, lumbermen and fishermen (4.54) than among the professional class where it was about 2.02 and lower still among certain of the professions.^{xx} Since the problem of job placement is concerned with educational qualifications it follows that many replacements for positions requiring education must come from homes with little educational advantage; from the single unit rural schools and from families of lower economic status.

Immigration

Immigration has played an important part in the growth of Canada's population. Figure 4 indicates the periods when immigrants flocked to Canada whether

^x See Bulletin No. F-4, The Future Population of Canada, Dominion Bureau of Statistics, 1946. 50 cents.

^{xx} See Bulletin No. F-3, Occupational Differences in Fertility, Dominion Bureau of Statistics, 1945. 50 cents.

due to colourful advertisements from Canadian sources, encouraging letters from recent immigrants to friends and relatives at home, or financial conditions and prospects at home and abroad.

Some idea of the original sources of Canada's population may be gleaned from a study of racial origin of the Canadian people. Of the eleven and a half million people one-half were of British extraction, one-third French, followed by German (4 - 5 p.c.), Ukrainian, Scandinavian, etc. These percentages neither represent all who at one time entered Canada from these countries nor do they differentiate between those who came direct or by way of the United States. Among them are many who give the parentage of their father but ignore that of their mother. Many are several generations removed.

Of the population in 1941, 92.6 p.c. were born in Canada, 1 p.c. in other British domains, 3 p.c. in the United States, 6 p.c. in European and 0.08 p.c. in Asiatic countries. More women than men entered from the U.S.A.; about as many women as men from the other British countries; about two-thirds as many women as men from other European countries and one-twentieth as many women as men from Asiatic countries.

The extent of future immigration to Canada is at the present time uncertain. Whether it will ever again greatly exceed emigration or not is problematical. There will be redistribution of population in Canada and throughout the world for the next several years. The numbers involved will depend on conditions at the time and policies with respect to migration. Many people who would like to move will lack the necessary means. Others will be restricted by quotas. Nor can immigration policies be formulated without consideration of the population which can be supported. Barren lands in the North and other stoney or arable land unsuited to agriculture imposes restrictions on population expansion.

Trade

Trade, another contributing factor in population growth is affected by both domestic and international considerations. It is an important determinant in urbanization, size and location of markets, etc. Natural resources are usually basic to it and, in this, Canada is particularly fortunate. To date the processing of these and the production of secondary products from them is but in its infancy and awaits advances in the new chemistry as well as increased production.

Trade may be considered as an alternative to migration. In a world without barriers to trade or migration the population would tend to be distributed in accordance with resources and developmental stage. If the people cannot move, then trade tends to distribute products in accordance with the distribution of population. If neither products nor people can move, great inequalities in standards of living prevail. The two, trade and migration, are closely related.

Emigration

The problem of emigration is similarly enigmatic. There has been little restriction on freedom of movement between parts of the British Commonwealth and the movement of population between Canada and the United States has at times reached large proportions. No record of this latter movement was kept until recent years although its seriousness has been recognized for some time. Of recent years a record has been kept of Canadians returning from the United States. Almost 54,000 returned in the peak year 1926, not inclusive of British-born who had acquired Canadian domicile or naturalized Canadian citizens returning to Canada. The total of 62,293 for all these serves to indicate how large this traffic is at times.

Since 1933 from 6 to 14 thousand immigrant aliens have entered the United States from Canada each year. These, together with United States citizens returning from Canada and persons deported from Canada totalled from 10,415 in 1933, the lowest for any of the years, to 19,255 in 1938. It might be noted that whereas the movement from the United States to Canada decreased from 1933 to 1938, that from Canada to the United States increased with returning prosperity.

Many college graduates and professional men have received lucrative offers from the United States and thousands of others have crossed the border in the hope of bettering themselves. Emigration is closely connected with employment opportunities and depression periods.

Population and Industry

If, as has been suggested, population increase through either a high birthrate or immigration is decelerated there is the possibility of a static or declining population in the future. This would not be conducive to such expansion of industry as Canada has experienced during the past half century. Probably half of the capital formation in this country during the period of rapid growth served to meet the needs of a growing population, without necessarily increasing the per capita productivity, income or consumption. Increased population provided for capital investment from savings which were relatively safe and easily available. A rapidly growing country invites the construction of many large scale items of durable construction planned and built for larger populations, it invites planning and saving for a promising future.

With a stationary or declining birthrate only a robust immigration policy could provide such expanding home markets as were previously available. Two alternatives remain if business expansion is to continue. Under the first, foreign markets must be increased or large sums of money be invested in the expanding economy of other countries. Under the second, a concerted effort would be made to use expanded industry to increase the level of living in this country. Theoretically it would seem that the level of living should be higher if population growth is checked. Unfortunately there are disturbing psychological factors which could have a depressing effect on the market, reduce investment and force unemployment both of people and resources.

The advantages of an expanding population should not be minimized. So long as the country is not greatly overpopulated (and the additional population is not a charge on the country) additional consumers will affect internal trade favourably. But population trends within Canada are not the only determining factors in our economy which reflects opportunities for trade and investment abroad. Nor are any of these free from the effects of changing internal policies. Both internal and external influences must be considered in an evaluation of job opportunities in Canada's post-war world.

Extent and density of population are important factors in economic development. Availability of jobs is in part determined by upward, downward or static trend. Canada is by no means over-populated and her population will probably increase for some time.

It would not be a simple matter to estimate the optimum population for Canada, in fact it is doubtful if any estimate would be correct for any great length of time. Many factors are involved such as desirable level of living, technological and productive improvements, utilization of marginal and submarginal land, external trade, etc. Similarly any estimate of probable future population

of Canada is subject to wide error as it involves among other factors, trends of future death rates, future birth rates, emigration and immigration, effect of such social service policies as family allowance, state hospitalization, health services, etc., effects of war conditions, age of marriage and position of women in the business world. Emigration, immigration and trade are in turn dependent on conditions in other countries as well as those in Canada.

4. LAND AREA

Area of land is one of the factors which limits the possible increase of wealth in a country. The availability of that land and its productivity are limiting factors in expansion. Land may add to the wealth of the country by being productive, by containing mineral resources, through being forested or in any other way being suitable for economic activity. Making of potential land available through settlement, fertilizers, irrigation, drainage, etc., is one way of increasing the wealth of the country if there are settlers ready to utilize it. New methods, new crops, new chemical products, etc. may also unearth new uses for lands formerly classed as unproductive. Some land blocks have been occupied which have proven to be submarginal for farming. Some of the expedients suggested above might return a number of them to the productive category.

Table 4 gives the land area in square miles for Canada and the provinces classified as agricultural, forested, or unproductive. The total includes all present agricultural land of all classes and land that has agricultural potentialities in any sense.

Table 4. Land Area of Canada, Indicating Amounts Occupied, Agricultural, Forested and Unproductive^x

Province	Occupied	Total Agricultural Land (present and potential)	Forested Land	Net Production Land	Waste and Other Land
	sq.mi.	sq.mi.	sq.mi.	sq.mi.	sq.mi.
Prince Edward Island ...	1,333	1,970	725	2,085	99
Nova Scotia	2,722	12,640	12,000	17,730	3,013
New Brunswick	2,749	16,750	21,960	25,410	2,063
Quebec	20,427	68,350	364,370	383,290	140,570
Ontario	28,915	102,870	237,200	270,720	92,562
Manitoba	24,003	50,590	92,940	124,380	95,343
Saskatchewan	89,682	125,080	86,070	182,670	55,305
Alberta	63,366	136,640	130,680	216,240	32,560
British Columbia	4,736	20,700	214,460	221,810	137,469
Yukon and Northwest Territories	4	14,070	60,000	70,067	1,393,496
CANADA	237,937	549,660	1,220,405	1,514,402	1,952,480

^x Adopted from page 10, Canada Yearbook, 1943-44.

A comparison of the columns showing the total lands suitable for agriculture with the amount which might be used would seem to indicate that only about 43 p.c. of the possible agricultural land is so occupied. A fairly large part of the unoccupied land is forested. However, it does not follow that this land should be cleared and converted to farming area. Canada's forests are among her greatest

sources of wealth. But apart from those forested areas which should remain forested, and the sub marginal land which has proven unsatisfactory for farming, there is still other land available for settlement, although its utilization may present problems and considerable work may be necessary in order to make it productive. This involves expense. The cost involved in preparation of the soil must be such as to allow for adequate returns.

Land area is a limiting factor in employment. Land more or less suited to agriculture, forestry, grazing, etc., will be utilized when the products find a ready market. But as land is not good and poor, but of infinite variety, subject to seasonal fluctuation, dependent on the weather, etc., and as market demand is comparatively unpredictable, only long-term judgment can be passed on the suitability of land for various productive purposes. Some land is classed as marginal. During periods of high prices and favourable seasons its returns are profitable while during depression periods and periods of drouth, etc., those living on such land are likely to add to the public burden and deepen the depression.

Canada is one of the last countries to have her frontiers pushed back and this process has not yet reached its limit. Nor have the natural resources on much of the land been explored, exploited or harnessed. There is considerable room for optimism here, particularly considering Canada's favourable position for airway routes.

5. TECHNOLOGY AS A FACTOR IN PROSPERITY AND EMPLOYMENT

The effects of technology can only be measured indirectly. Nevertheless our world is being remade through advances in science and improved techniques. These are observable in newly-invented appliances, new processes and new forms of organization both for peace and war. During war-time the importance of successful innovations and experiments is readily recognized by everyone. During peace-time the influence of improved technology may be observed as it modifies firmly-constituted habits. In part this is affected by mass production through which new products in quantity are made available at a price within the reach of a great number of people.

New inventions are prone to be met first with ridicule by a sceptical public and later with aggressive hostility by vested interests which stand to lose if the new is generally adopted. This attitude and opposition has been found whether the inventions were in the form of labour-saving, mechanizing, factory machinery; transportation facilities whether canal, horseless-carriage or aeroplane; or even articles for personal use or consumption.

It is not suggested that there should be no opposition to the new. Not all innovations or inventions are good and while a scientific approach towards their acceptance would be most desirable the new should prove its worth. But it should be kept in mind that the new, treated with distrust, may shortly be generally accepted by the same people.

Nor are all of the effects of new inventions likely to be desirable. Some will be intrinsically bad while others, good, bad or indifferent are almost certain to appear objectionable to one or several of the vested interests - social, economic, religious or political.

Technological progress must from its very nature be spasmodic in appearance. Minor technical improvements are most frequent, but have less effect on general progress. Great inventions, which are comparatively rare in occurrence, have effects which gain in momentum with further refinement and more general acceptance.

Inventions are of myriad variety. They may result in reducing the cost of capital equipment, using land more effectively or economically, saving man-hours in production, developing new products or creating new wants. The growth of some are as an expanding snowball; from small beginnings they assume momentous importance and few observers, if any, can see their possibilities when first they make their appearance. Consider, for example, electric power, telephones, automotive mechanisms, hard-surfaced roads, aeroplanes, not to mention the new field of fibres and plastics from the new orientation in chemistry.

The utilization of these new forms and forces has increased manifold the per capita horsepower available. It has affected every way of living and the end is not yet.

Technology and Job Opportunities

The introduction of technological improvements has brought forth arguments from the time of the industrial revolution in Britain during the middle of the Eighteenth century to the present. The main contention has always been that each new machine introduced throws a number of people out of work. This argument falls on deafened ears except during times of economic stagnation and severe unemployment. Then the whole blame is usually placed on the machine rather than being distributed among a number of functioning forces. Actually there is little relationship between the use of new contrivances or methods and periods of depression or numbers out of work.

Such an assumption would depend on there being a certain amount of work to be done at any one time whereas the amount of work to be done is dependent on many factors; in fact the introduction of new machines may open more jobs rather than less. This can be easily understood if it is recalled that in 1939 it was estimated that some 15,000 or more jobs connected with the "buggy" industry had been done away with by the advent of the automobile. Offsetting this loss of coachmen, harness makers, livery stable hostlers, etc. we have some three times as many automobile workers besides all the repairmen, filling station operators, truck drivers, etc. Such substitution increases work opportunities.

In no field of endeavour is there any basis for assuming a direct relationship between the number of machines used and the number of men unemployed. It is possible that during a period of adjustment a new machine will throw men out of work although in many cases these are rapidly absorbed where demand can be increased in an expanding industry. A young growing country such as Canada should be able to absorb technological improvements and increase efficiency without undue unemployment while there is always the possibility of increased outside markets. This happened in the manufacturing industry where man-hour production has steadily increased and on the farms in somewhat lesser degree.

In any but expanding industries workers will be displaced through technological improvements. On the other hand individuals in many occupations may be affected differently than the group. Youth and age are most likely to suffer in the long run. Likewise such workers as shoemakers, dressmakers, etc. are likely to be replaced by machinery and may never work again as shoemakers although more people are working in shoe factories and more consumers wear more shoes.

Alternatives have been proposed where the industry is not expanding sufficiently to absorb all the workers despite technological improvements. They are to lower the rates of production or require less work from each worker by reducing the day or week or, on the other hand, to increase the general living

level for all. Those suffering from technological unemployment, as well as those displaced by loss of markets, change of consumer favour, etc. must find work elsewhere. Usually this is a matter of weeks but the period of unemployment may last for months or even be permanent depending on the labour market, age of the workers, skill and experience, etc. Under peacetime conditions the flow of capital into new enterprises provides opportunity for the displaced workers. This occurs when an expanding economy would seem to promise financial gain for the new investments.

There is the possibility that provisions should be made for retraining displaced workers. Employment offices may find job opportunities but in many cases the workers cannot qualify. When employees are scarce employers will take unskilled workers and provide training for them. More such training occurred in Canada during the last war than at any time previously but the amount done at present is inadequate to meet the need.

This section would be incomplete without mention of some of the comparatively new fields or industries which have not as yet reached full production. Among them are: plastics in which production was doubled during the war years; television and frequency modulation in which startling progress was made during the war years but production for the public was out of the question; radar, which should have a limited demand for air and water transportation; synthetic rubber, a war-born industry with a fair future; synthetic fibres such as nylon, which will find a rather large steady demand; "wonder" drugs, prophylactics, etc. which will find a steady limited market; electronics and fluorescent lamps which will find a ready sale and frozen foods an industry which will expand for some time. These are but a few of the new products which will influence production, demand and work.

Some idea of changes in technology, variety of products produced and related expansion should be reflected in the number of patents granted from year to year. From 1868 to the present about three-quarters of the patents were registered from the United States, then came Great Britain, Canada and a number of other countries. The majority of the Canadian patents have come from the most densely settled areas of Canada where industry is located. During the last few years patents have indicated activity in such fields as: synthetic resins and plasticizers; new motor fuels and lubricants; processing of vegetable oils; insecticides; synthetic vitamins; new light alloys and powder metallurgy; induction heating and electric welding; fluorescent lamp starters, switches and circuit breakers; machine tools and many others.

Table 5. Patents Granted; Copyrights, Industrial Designs and Trade Marks Registered for Selected Years, 1868 to 1944

Year	Patents Granted	Patents Granted to Canadians	Copyrights Registered	Industrial Designs Registered	Trade Marks Registered
1944	7,803	480	2,869	266	1,164
1943	7,686	500	3,214	177	1,185
1940	7,234	571	3,214	402	1,721
1939	7,578	620	3,146	356	2,181
1935	8,713	885	3,060	430	1,686
1925	9,508	1,302	2,795	478	2,795
1915	6,867	1,281	1,675	224	1,106
1900	4,522	707	893	126	447
1873	1,016	134	30	163	-
1868	546	34	6	32	-

PART III

1. THE WORKING FORCE

The work being done by the people of any country at any given time is dependent on a number of factors of which their natural resources and the stage which they have reached in their development are two of the most important. This is particularly true of Canada in which vast areas and immense natural resources have hardly been explored and only the Southern portions at all exploited. Four distinct economic areas may be considered as available for development:- first, the Maritime Provinces with lands, forest, mines and fisheries as chief resources; second, the Ontario-Quebec region with lands, forests, mineral wealth and water power; third, the Prairie Provinces with lands the chief asset but also coal and some oil chiefly in Alberta; and finally British Columbia with fish, forests and mines, some agriculture and the possibilities of water power. Available data do not provide a basis for estimating the potentialities of the Northwest Territories and Yukon. Considered as a whole, Canada's arable lands seem to be her chief natural resource, although other resources predominate in various sections of the country and give a key to the work of the people.

Since 1881 when information on occupations was first collected in Canada in a somewhat similar manner to that compiled at present, the list of gainful occupations has greatly lengthened. This has resulted from the subdivision of primary industries, specialization and the rise of new occupations as a result of progress in science and technology. The division of labour in the older occupations together with expansion in the newer ones has rendered much of the occupational data incomparable for the period. It is even difficult to classify the gainfully occupied population of different censuses under general headings. Nevertheless, increasing demand for such information necessitates that such classification be attempted.

From 1881 to 1931 the gainfully employed were recorded for age 10 and over. In view of the decrease in child labour, compulsory education and lengthening of years at school, only those gainfully occupied 14 years of age and over were tabulated in the 1941 Census. In 1921 only 2.1 p.c. of the boys 10 to 13 years of age and 0.3 p.c. of the girls of the same ages were classified as gainfully employed. The boys were mainly employed in agriculture, the girls in service.

The Gainfully Employed, 1941

The Canadian population, according to the census of 1941, was placed at slightly more than 11.5 million. There were about 372,000 more males than females. About 8.5 million of these were 14 years of age or older, an age range which one might expect to find in the working force with the expectation, however, that many from 14 to 18 would still be in school, and many above 60 would be retired.

Of this total about 49.2 p.c. comprising 3,363,000 males and 833,000 females were gainfully occupied. Another 9.2 p.c. of the total was composed of 785,000 farm women 14-64 years of age. The student group of 280,000 males and 286,000 females formed another 6.6 p.c. of the total. About 3 p.c. were unemployed. Many of these were but temporarily out of work while moving from one job to the next. The remaining 27.7 p.c. would include all others such as housewives other than farm women, the aged, infirm, inmates of prisons and penitentiaries, etc.

By October 1944 the picture had changed somewhat. The population 14 years of age and older had increased to about 8,904,000. The number in the armed forces had increased to 740,000 males and 37,000 females, or 8.7 p.c. of the total population for both. The numbers gainfully occupied comprised 48.5 p.c. of the total

Chart 8

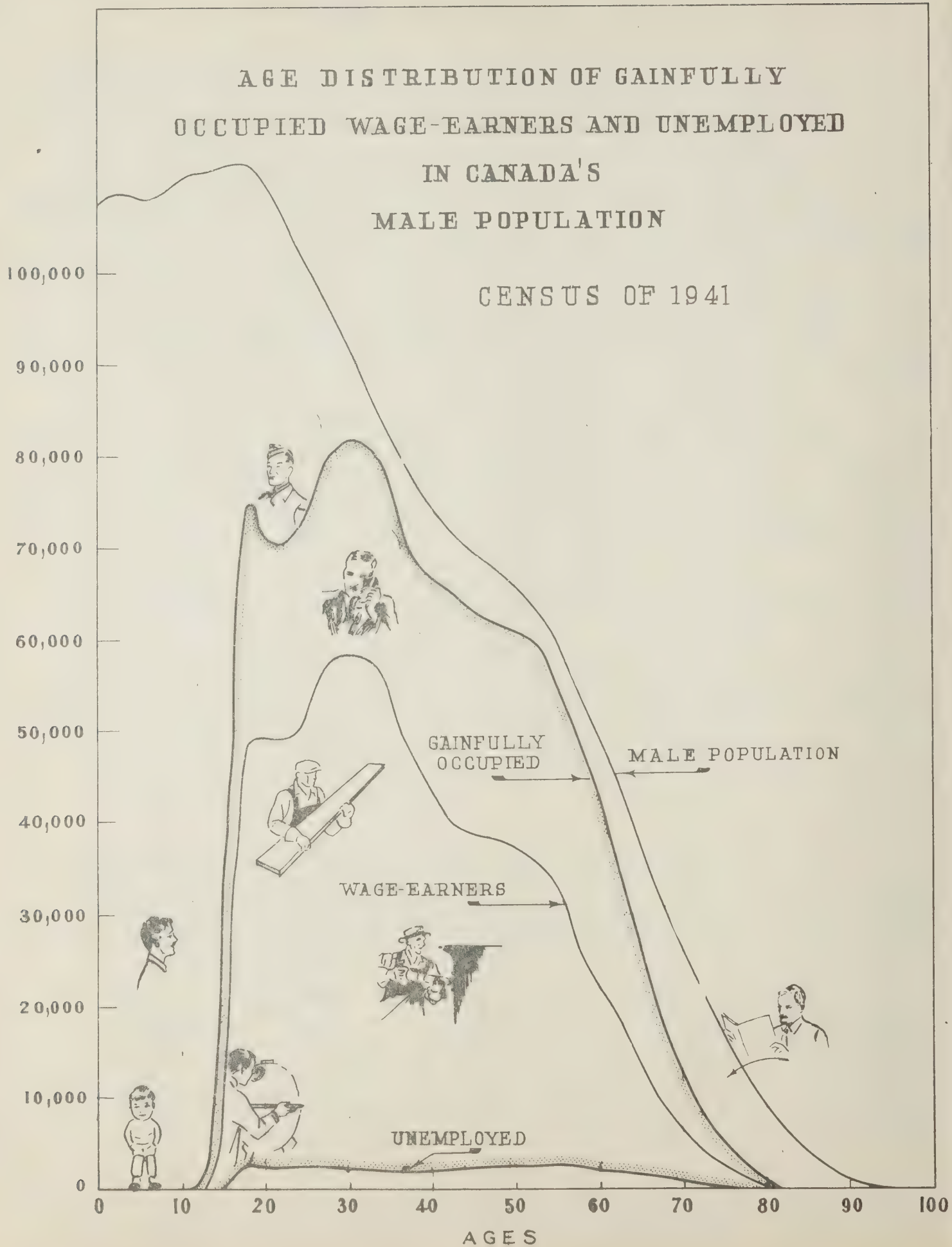
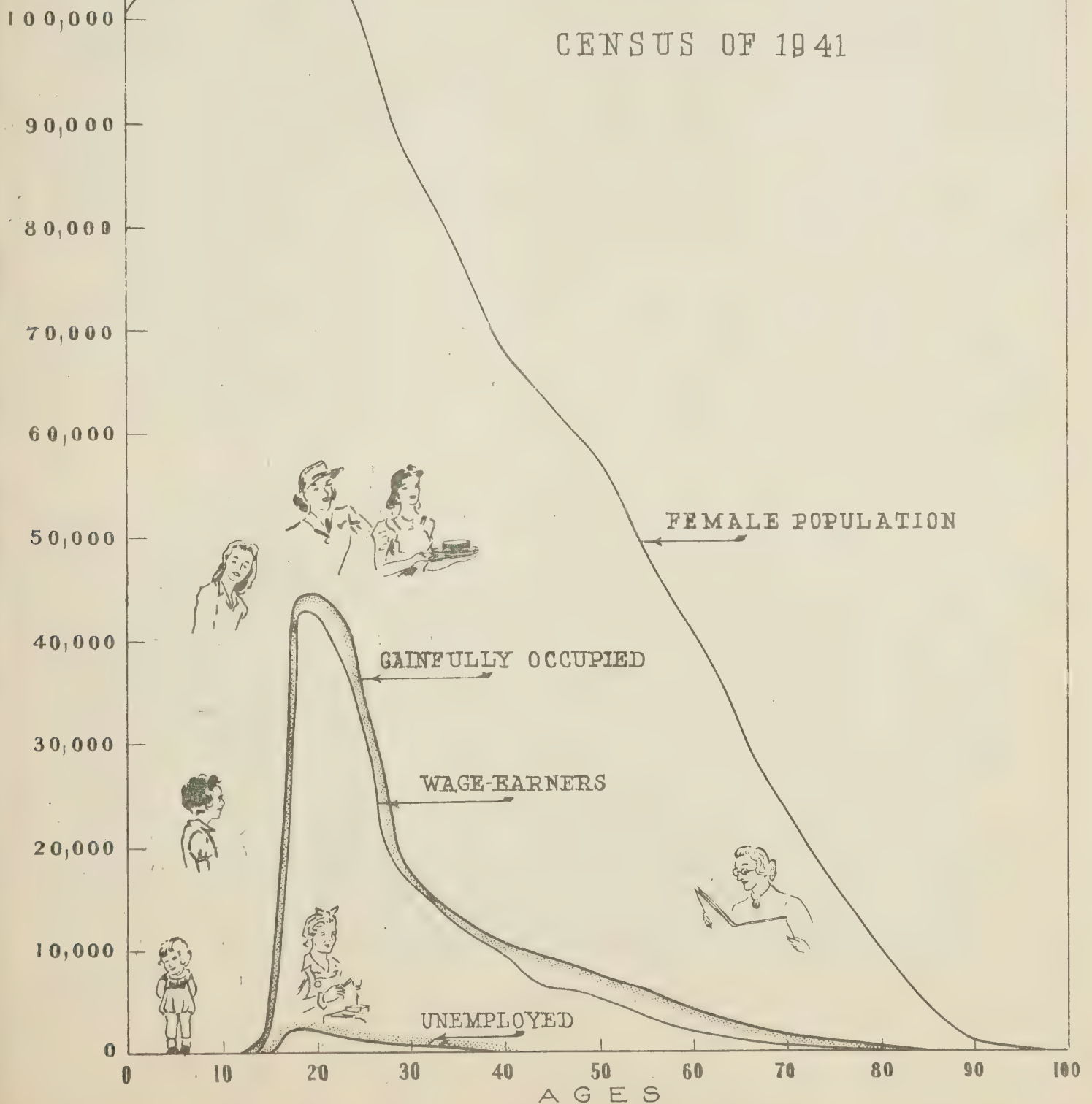


Chart 9

AGE DISTRIBUTION OF GAINFULLY
OCCUPIED WAGE-EARNERS AND UNEMPLOYED
IN CANADA'S
FEMALE POPULATION

CENSUS OF 1941



or 3,241,000 males and 1,077,000 females. There were 5,000 fewer women on the farms and only 61,000 or 0.7 p.c. of the population classed as unemployed. By the spring of 1945 the total population of working age had increased another 44,000 while the number in the armed forces was down 15,000 and the number employed in industry down 22,000. However, the number employed in war industry had dropped considerably while the number in civilian industry showed an increase. The number unemployed increased by 12,000 or 0.1 p.c. of the total.

In brief, the effect of the war on employment is indicated by the number gainfully occupied increasing from 3,793,000 in October 1939 to 4,318,000 in October 1944 while the number in the armed forces increased from 70,000 to 777,000. Before the war there was a surplus of most classes of workers but in 1944 the surplus had been used up and there was a decided general shortage. This was apparent in the dearth of labour for farm, mine, factory, etc. Although many of these had increased their skill and others were trained, there was a decided shortage of skilled and experienced workers in most civilian and many war industries. These shortages would have been infinitely worse had not the government instituted some measure of control. But there were other shortages which must be considered in any attempt to evaluate the possibilities for a high degree of employment in post-war years. Some of these resulted from lack of shipping needed to transport foreign materials to our factories and workshops. Other shortages were due to a dearth of natural components such as rubber, cotton, wool, silk, nickel, etc. Others resulted from the conversion of factories to the manufacture of war goods.

In the reconversion which is taking place since the war's close these are indications that the purchasing power of the general public is high and the demand for many products is ample to ensure a high rate of employment for some time at least. Shortage of supplies for some years has built up a backlog of orders while relatively high earnings coupled with these shortages have resulted in the purchase of bonds as well as habits of spending freely.

Working Status of the Gainfully Occupied 1931 and 1941

The gainfully occupied are conveniently divided into four classes according to their working status although there are individual cases where placement in one or other of the different categories is difficult, if not impossible. First, there are working proprietors or entrepreneurs who conduct enterprises which they control and in which they hire others to help with the work. Next, come the "own-account" who are independent workers owning and managing their business affairs and depending on their own labour. Among such are small farmers, shop-keepers, doctors, dentists, etc. Both of these groups are made up of enterprisers who take the risk of management and do not receive a fixed rate of compensation but are dependent on the profit earned by the business.

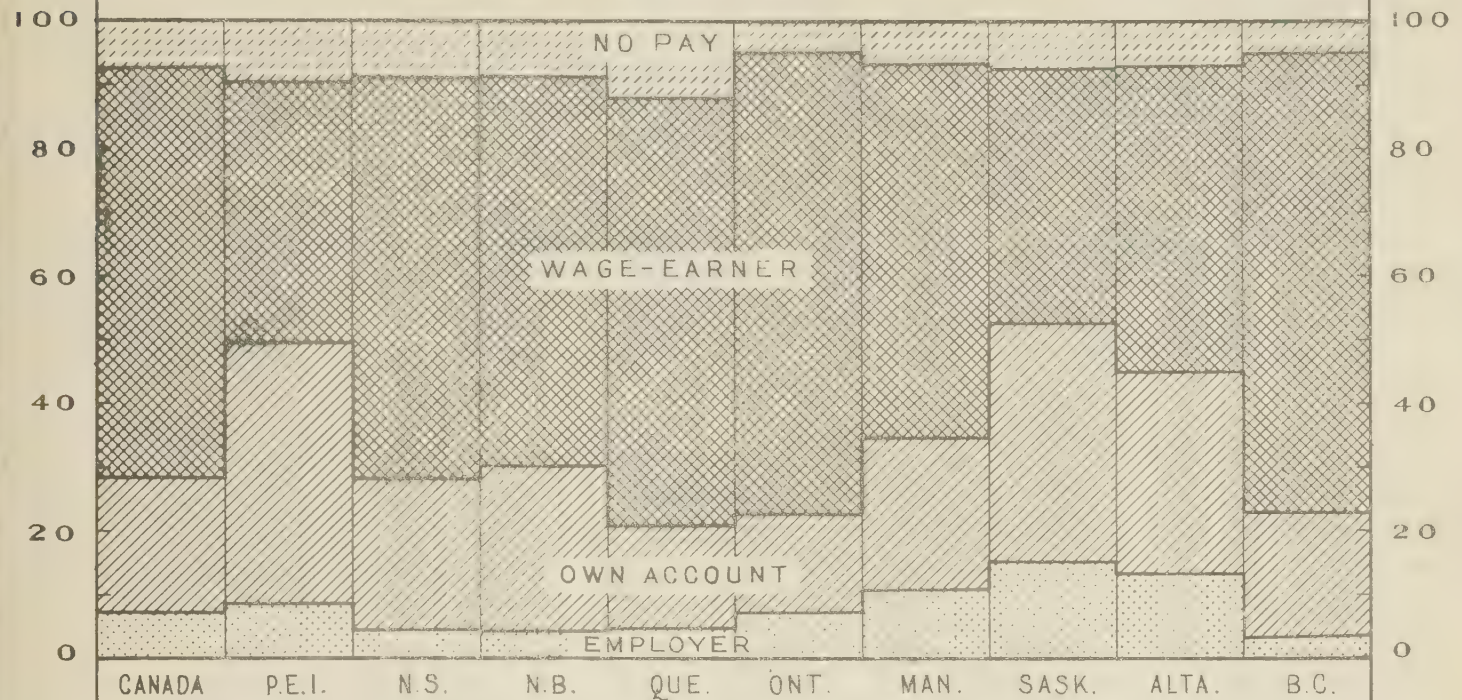
The others are divided between the two categories, employees, wage-earners and unpaid labourers. Employees receive remuneration whether as salary, wages, commission or piece-work. "No pay" workers receive no fixed remuneration in cash, any payment being limited to a living allowance mainly in kind. In this group were sons and daughters of 14 years and up working on their father's farm or in his shop, and nuns and brothers teaching mainly in Quebec schools.

The number and percentage of gainfully occupied in Canada, 1931 and 1941 are given in Table 6.

hart 10

PER CENT DISTRIBUTION OF GAINFULLY OCCUPIED 14 YEARS OF AGE AND OVER BY STATUS 1941

MALES



FEMALES

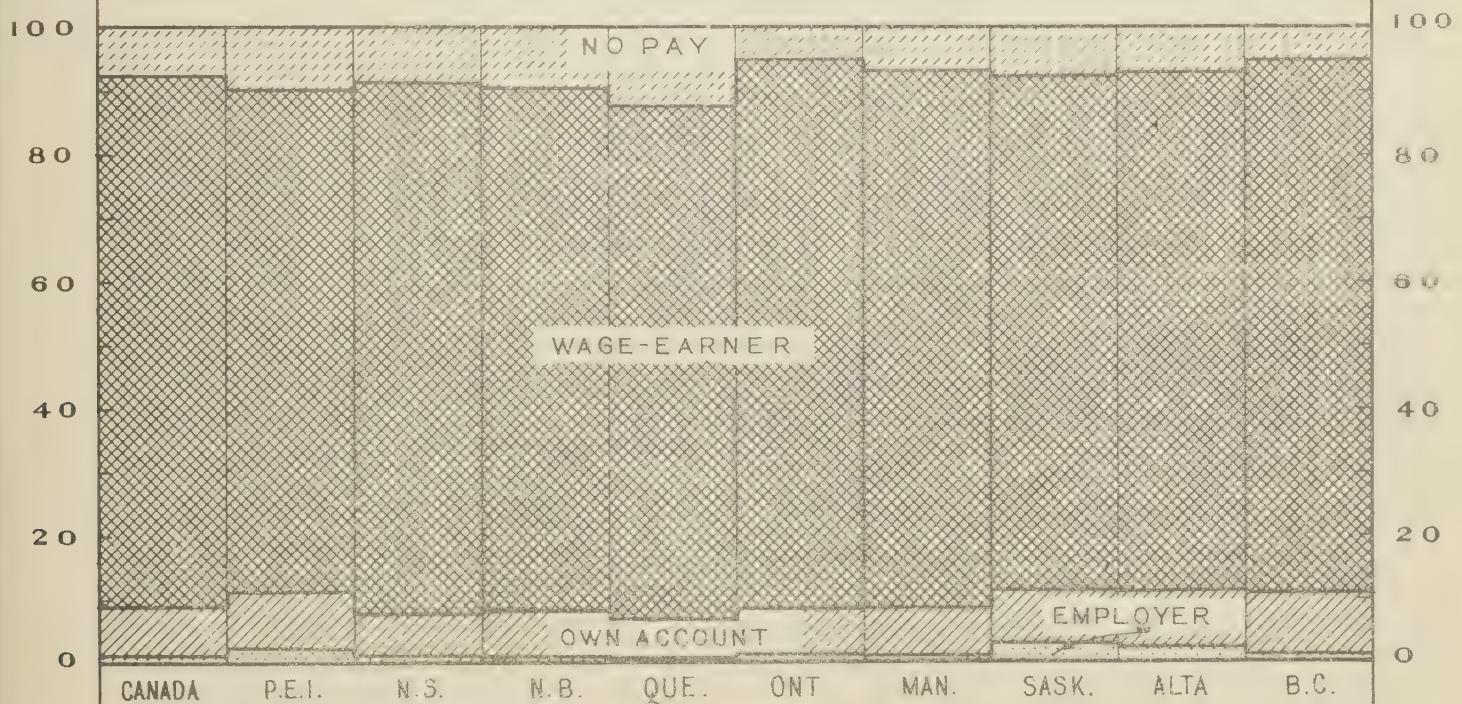


Table 6. Gainfully Occupied, 14 Years of Age and Over, by Status and Sex For Canada and Provinces, 1931 and 1941

Status	1931		1941	
	Number	p.c.	Number	p.c.
<u>Male -</u>				
Employer	237,175	7.05	387,886	11.89
Own account	730,295	21.71	549,721	16.86
Wage-earner	2,117,357	62.96	2,022,260	62.01
No pay	278,284	8.27	501,504	9.24
<u>Female -</u>				
Employer	9,564	1.14	18,906	2.84
Own account	59,172	7.10	54,781	8.23
Wage-earner	699,441	83.98	547,837	82.28
No pay	64,633	7.76	44,335	6.66

In 1931, 68.4 p.c. of the wage-earners lived in urban communities of 1,000 or more. In 1941, 72.7 p.c. of the wage-earners were to be found in urban areas while another 16.2 p.c. lived in unincorporated rural hamlets or other such groups leaving but 11.1 p.c. as farm help dwelling on the farm. During the war years this was reflected in cities being greatly overcrowded while the farmers were short of help.

The drop in the number of employers and the increase in the number of "own-accounts" reflects the large number of farmers and small shop-keepers who were unable to find assistance and had to carry on by themselves. The number of small shop-keepers who usually close shop and become employees when employment opportunities abound did not offset the number changing from employer to own-account classes.

Figure 8 classifies the workers in a similar fashion for the provinces, 1941. Whereas about 63 p.c. of the gainfully occupied males and 84 p.c. of the gainfully occupied females for all of Canada are wage-earners, percentages from province to province vary considerably. Percentage of male wage-earners varies from 34 p.c. in Saskatchewan and Prince Edward Island to more than 70 p.c. in Ontario and British Columbia. Typically agricultural areas have many owner-farmers but comparatively few wage-earners, while industrial areas have few employers but many employees. Whereas one manufacturing concern with a few part-owners, or a single owner, may hire several hundred or more wage-earners, few farms hire more than one or two extra men. Percentage of wage-earners may give some rough index of degree of urbanization. In Prince Edward Island, Saskatchewan and Alberta about half of the gainfully occupied males were managing their own business or farm.

Percentage of no-pays was about the same for women as for men. Only in British Columbia and Quebec were the percentages for women higher than for men. In this connection, it should be kept in mind that girls helping in the family kitchen are not classed as "no pays" whereas boys working in the fields come within that category.

Changes in the Proportion of Workers in Various Occupations

Just as the changing proportion of men classed as own account in urban areas forms a crude index of national prosperity, so changes in the numbers

employed in basic occupations and industries give some indication of the trend in trade and change in emphasis among the occupation groups whether to meet war or peace demands.

A comparison of the males gainfully employed in 1931 and 1941 shows an increase of about 100,000 in gainful occupations exclusive of those in the armed forces.

Table 7 shows the number of males 14 years of age and over classified according to occupational group for Canada, 1941, and the percentage distribution for the groups from 1901 to 1941.

While the number of males doing agricultural work increased during the forty-year period, the proportion dropped from where it formed more than half of the total gainfully occupied to constitute less than one-third in 1941. From 1939 to 1944 the number of males in agriculture dropped 200,000, the greater part having left before the 1941 Census. Despite the drop, it was still the largest single group.

The proportion in manufacture, which is the second largest group, increased slightly more than 3 p.c. from 1901 to 1941. The increase in manufacture during the war period was considerably higher, but time will tell whether or not the change was permanent. Almost one out of six employees was employed in manufacturing at that time.

The third largest group in 1941 was in personal and professional service, both branches having increased about equally during the period. Transportation, trade and finance increased about equally in relative importance. Most of the other groups did not change radically in relative numbers. As a matter of fact the table chiefly indicates that Canada was expanding industrially during the period. Increased efficiency in agriculture freed many men for the service occupations while improvements and expansion in manufacturing made positions for more clerks, bookkeepers and accountants and increased the demand for workers in trade and communication.

Table 7 also presents a similar picture for gainfully occupied females. The service group which employed slightly more than half of the female workers in 1941 had employed 57 p.c. in 1901. It is interesting to note that the professional sub-group increased in proportion while the personal service group dropped 7.5 p.c. Increase in the number of beauty parlour operators did not compensate for loss in domestic service.

The second largest group, manufacturing, lost relatively even more. This was probably due to a large number of small establishments such as millinery and dressmaking shops passing from the scene. The greatest gain was registered in the clerical group which jumped from 5.3 p.c. to 18.5 p.c. Noticeable gains were also shown in trade, finance and transportation while the loss in agriculture and labour was significant.

The trend for several of these may be observed from Figure 11 in which was plotted the numbers in these groups from 1901 to 1941. That for males shows the war-time drop in the numbers employed in agriculture; the rapid war-time increase in manufacture; the steady increase in professional service but more erratic advance in personal service, trade and transportation. The number in logging fluctuated considerably while the number of labourers seemed to be determined largely by those not absorbed by other groups.

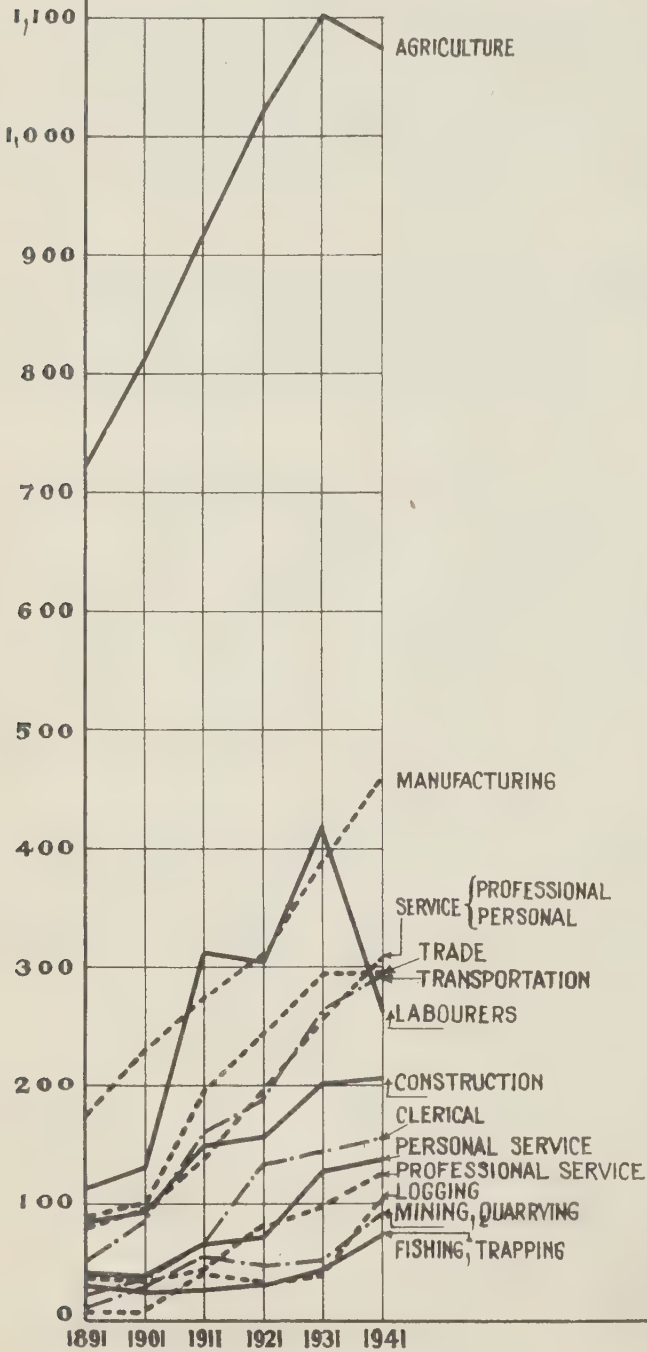
Chart 11

TRENDS IN NUMBER OF WORKERS GAINFULLY OCCUPIED IN OCCUPATION GROUPS

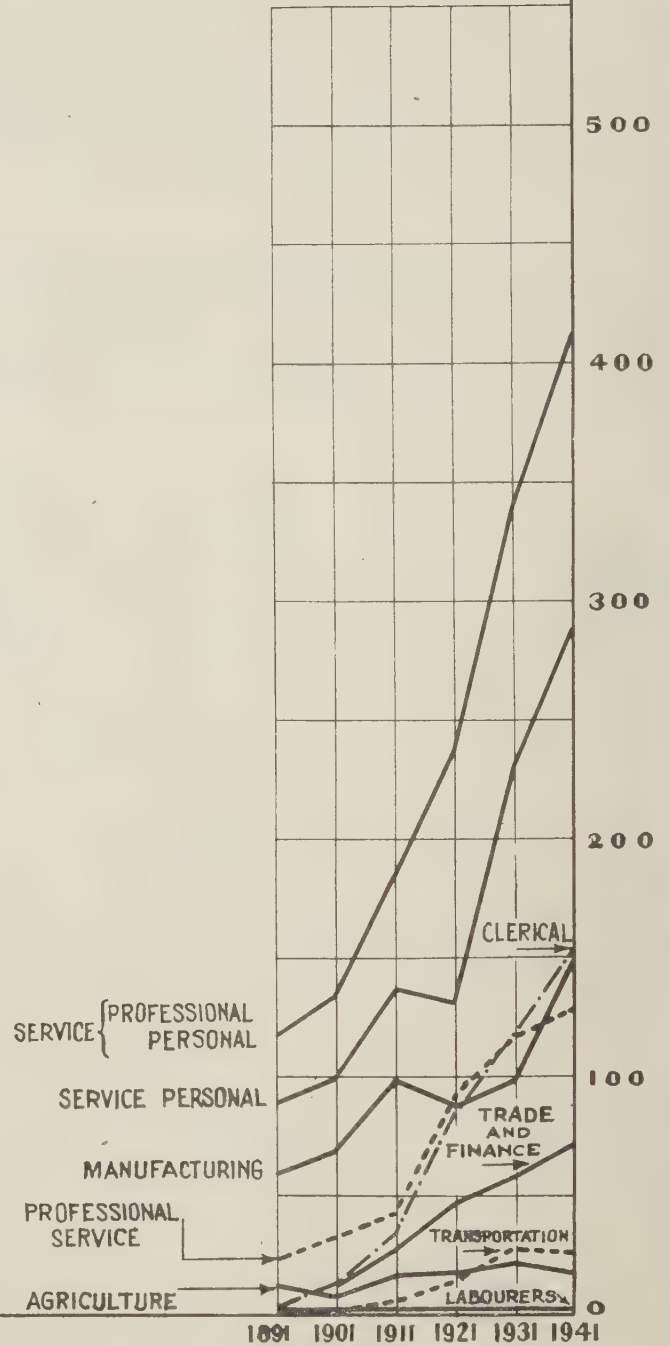
1891 - 1941

NUMBER
IN
THOUSANDS

MALES



FEMALES



PER CENT OF THE POPULATION, 14 YRS. AND OVER, GAINFULLY OCCUPIED, BY AGE AND SEX

-37-

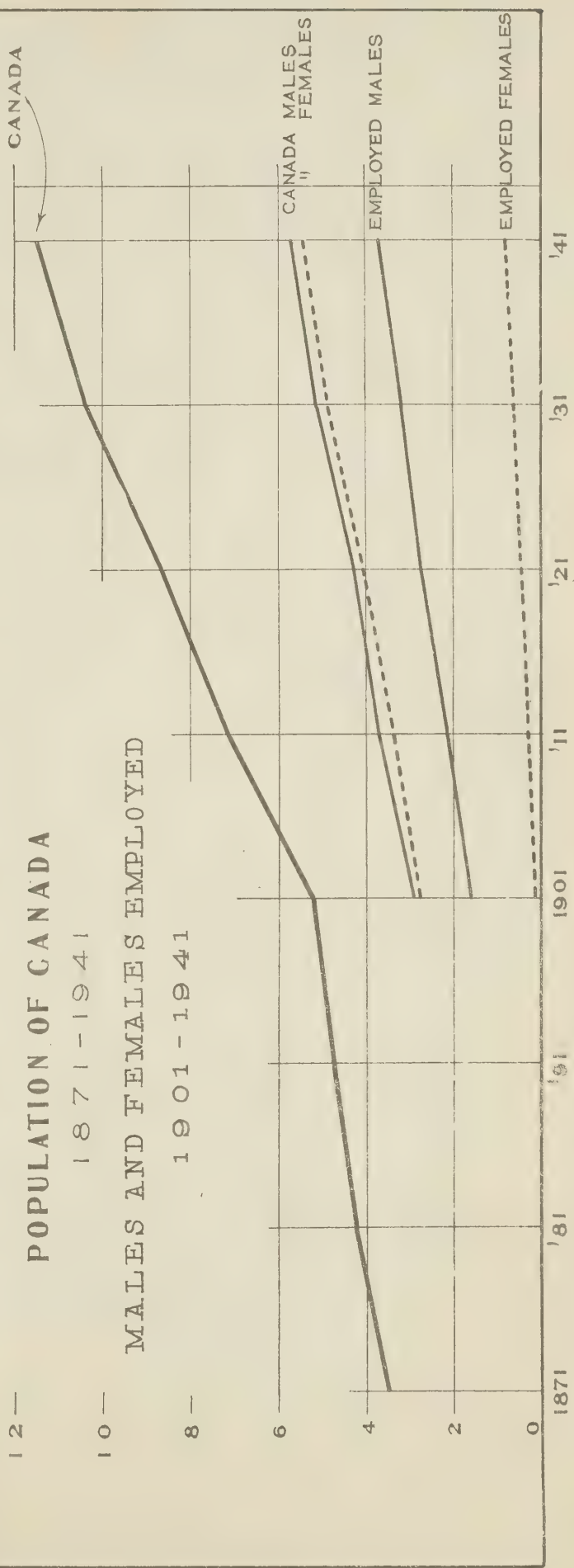
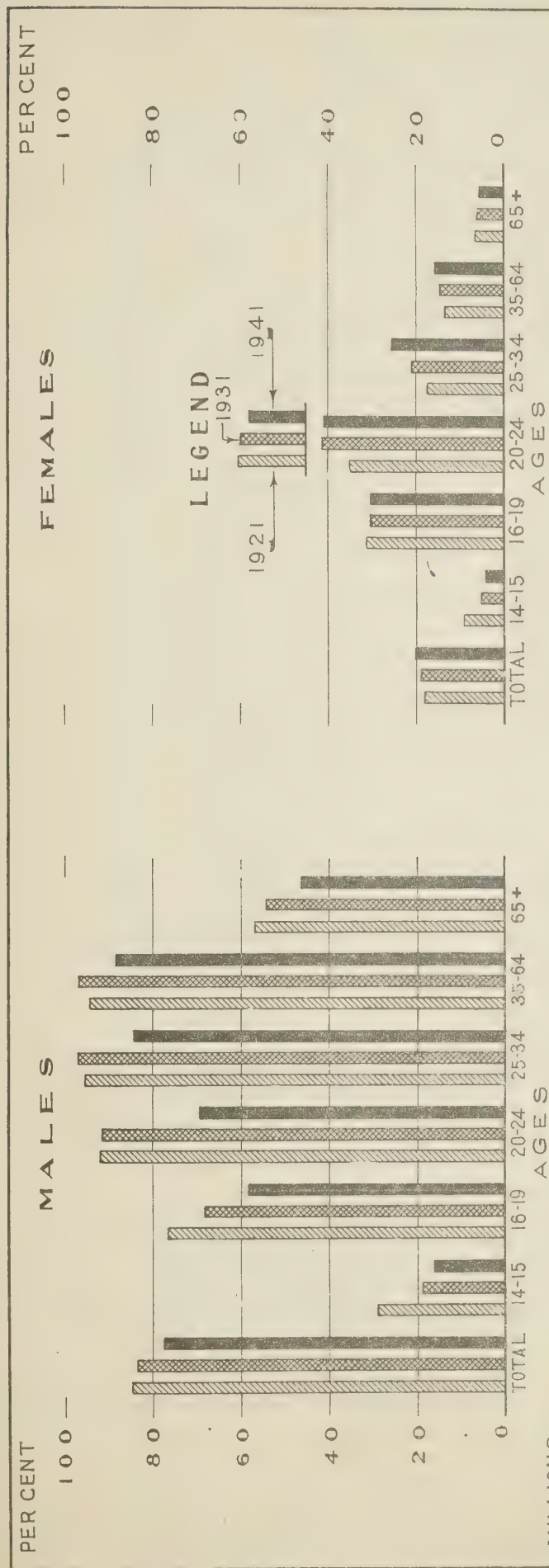


Table 7. Per cent of the Gainfully Occupied, 10 Years^x of Age and Over, Classified According to Sex and Occupation Groups for Canada

	1941	1941	1931	1921	1911	1901
	No.	p.c.	p.c.	p.c.	p.c.	p.c.
Agriculture	1,064,847	31.7	34.0	38.2	38.9	45.8
Fishing, trapping	51,126	1.5	1.5	1.0	1.5	1.8
Logging	80,248	2.4	1.4	1.4	1.8	1.0
Mining, quarrying	71,861	2.1	1.8	1.8	2.6	1.8
Manufacturing	561,000	16.7	12.1	11.8	11.7	14.8
Construction	212,716	6.3	6.2	6.1	6.4	5.8
Transportation	294,800	8.8	8.3	6.9	6.5	5.3
Trade and Finance	296,599	8.8	9.1	9.1	8.2	5.9
Service	308,550	9.2	8.3	7.2	5.9	6.5
Professional	120,782	3.6	3.9	2.7	2.3	2.6
Personal	144,726	4.3	4.3	4.8	2.9	3.1
Clerical	159,779	4.7	4.3	4.8	3.1	3.0
Labourers	251,389	7.5	13.0	11.4	13.4	8.2
Not stated	9,695	0.3	0.0	0.2	-	0.1
<u>Females</u>						
Agriculture	18,969	2.3	3.6	3.7	4.4	3.8
Fishing, trapping	324	0.0	0.1	0.0	0.1	0.0
Logging	2	0.0	0.0	0.0	-	0.0
Mining, quarrying	25	0.0	0.0	0.0	-	0.0
Manufacturing	148,180	17.8	15.2	18.3	26.5	29.6
Construction	777	0.1	0.0	0.0	0.0	0.0
Transportation	16,845	2.0	2.7	3.0	1.5	0.5
Trade and Finance	74,018	8.9	8.5	9.7	7.9	3.3
Service	416,906	50.1	52.1	46.3	50.4	57.0
Professional	127,084	15.3	17.6	18.9	12.5	14.6
Personal	288,651	34.7	34.4	27.2	37.6	42.2
Clerical	154,272	18.5	17.6	18.5	9.3	5.3
Labourers	804	0.1	0.2	0.1	0.1	0.5
Not stated	1,718	0.2	0.0	0.4	-	0.0

^x Data for 1941 is for 14 years of age and over. It does not include those on Active Service.

Figure 11 shows the distribution of women employees during the same period. It indicated a rise for all groups shown except labourers, although the rise in agriculture is but small. Personal service employs more than any other group. Here the rise from 1921 to 1941 reflects the increase in the number of shops providing personal services such as permanent waving for women. Clerical workers increased steadily in number throughout the period.

The number in manufacturing, trade and finance, and professional service shows a considerable increase although that in manufacturing was by no means steady. The number in transportation increased some.

It would not be wise to assume that occupations which have been absorbing increasing numbers of workers are those in which there is a strong present demand while those absorbing decreasing numbers have little opportunity for employment.

Agricultural employment in 1941 appeared to be in a decline but the drop was in part due to farm boys having enlisted and in part to the attraction of other jobs with higher wages and shorter hours. Actually it would be a comparatively easy matter for anyone interested in agriculture in 1945 to obtain employment.

An awareness of the facts of expanding and contracting occupations, while not necessarily reflecting current demand, does provide some basis on which a worker may be aided in selecting a field in which demand exceeds occupants and in which he would be reasonably sure of employment and advancement.

But a prospective worker must exercise considerable caution as apparent demand for such openings as office help may be such that a large proportion of the population may qualify whereas the worker may possess certain specific abilities which are rarely found and which could be developed through training to enable him to qualify for a limited number of openings suited to only a few applicants.

Generalizations from gross occupational trends are frequently misleading unless supplemented by a fairly exact knowledge of current conditions.

2. INCOME OF THE WORKING FORCE

Total Canadian income was plotted in the previous chapter to give some idea of the growth of the Canadian economy. It was concluded that the per capita income for the country had increased during the twentieth century and this increase could be attributed to such factors as settlement, expansion, technological improvement, better transportation and increased trade. This should be reflected in a higher level of living for the Canadian people although there would be fluctuations from year to year as the ready wealth of the country increased or decreased.

Per capita income may also be compiled to furnish some idea of what wages an average worker may expect in various areas of the country and from various occupations. Per capita income is not wages received but considerably less as per capita income does not tell the whole story. The wages for a man who is father of five children must be divided by seven to yield per capita income for the family. Similarly, the cost of living varies considerably from place to place. Rent, staple food articles, etc. vary from province to province, city to village, while transportation which is a necessity for certain farm and city workers is but a luxury for others in towns and cities. Similarly, farm cost of living, on the average, differs from city living costs where the farmer expends time and energy but requires little cash outlay to provide all, or part, of his milk, butter, eggs, meat, vegetables and some fruits. Outlay for shelter is considerably higher for urban dwellers as is expenditure for fuel and light on the average.

There are few families in an average position in all respects. It is because of this that census data once compiled is broken down for provinces, rural and urban, occupations, etc. Provincial figures are one step closer to the individual than Dominion figures and are useful for purposes of comparison.

The estimates in Table 8 are intended to present a comparative picture of cash income distribution across Canada. These are somewhat better than the national totals where a picture of business opportunities for any area is desired. National totals represent average conditions of a great country, composed of a number of widely different economic areas. Due to widely divergent climatic conditions, natural resources, etc., various sections of Canada have progressed along distinctly different economic lines. Long-term industrial and economic structures within a given area is largely influenced by that area's strategic

position with respect to shipping, marketing, etc., and affected by the volume of accumulated capital available which is generally greater in the older more thickly-settled communities than in the pioneering areas. Because these factors may cause noticeable fluctuations from year to year, figures have been presented for the inter-war period rather than for a single year. The estimates used here were based mainly on census returns. The results indicate that roughly 63 per cent of the total income payments in the Dominion were received by residents of Ontario and Quebec. The Maritime Provinces together received 7.2 p.c. and each of the Eastern Provinces from 6.9 p.c. to 8.5 p.c.

Table 8. Average Annual Aggregate Income Payments in Thousand Dollars and Per Cent by Provinces for the Period 1919-1937

	Average Annual Income	Per Cent	Per Capita
Prince Edward Island	22,721	0.57	256
Nova Scotia	153,627	3.83	295
New Brunswick	113,410	2.83	280
Quebec	939,438	23.48	347
Ontario	1,578,030	39.44	481
Manitoba	276,640	6.92	421
Saskatchewan	294,985	7.37	353
Alberta	281,061	7.03	430
British Columbia	341,407	8.53	408

Earnings of the Working Force

At the 1941 Census each wage-earner and salaried employee was asked to state his total earnings for the twelve months previous to the day of the census. He was to include the money received as salary, wages and commission or piece-rate payment. He was not to deduct any amounts paid out or withheld for pension schemes, insurance, National Defence Tax or War Savings Certificates. But he was not to include any amounts received from pensions, investments, workmen's compensation, relief or other such monies.

It must be kept in mind that only wage-earners were considered. Further a small proportion, 3 p.c. or less, failed to report earnings and those on Active Service were not included. Table 9 is based on a 10 p.c. sampling hand count and should be reasonably accurate for the total and areas given.

This statement gives a percentage distribution for the male and female wage-earning population according to yearly earnings for the last census year. Earnings of the males are comparatively higher than those of the females, both for Canada and the regions tabulated. This can be more readily observed from the following median (average) salaries computed from the same table. For males the median salaries were: Canada \$890, Maritime Provinces \$620, Quebec \$840, Ontario \$1,077, Prairie Provinces \$772, and British Columbia \$966. For females the median (average) salaries were: Canada \$455, Maritime Provinces \$351, Quebec \$407, Ontario \$540, Prairie Provinces \$428, and British Columbia \$493.

One quarter of the males received an income of \$1,250 or more, and another quarter received \$424 or less. In other words, 642,000 wage-earners in Canada received less than \$500 during the year preceding the census date - which

is less than \$9.00 a week (640,000 received less than \$450 a year in 1930-31). Separate census tables for heads of families and those who were not heads of families indicated that on the average the heads fared better than the others. Whereas 40.4 p.c. of the heads of families received an amount equal to \$1,000 or more only 10.8 p.c. of the non-heads received the same. Of course, the heads are older on the average but \$783, which was received by the average wage-earner, is none too much to bring up a family, even considering that the head is not the only contributor in a certain percentage of cases.

Table 9. Percentage of Male and Female Wage-earners Distributed According to Income for Canada and Selected Areas, 1941

		CANADA	Maritime Provinces	Quebec	Ontario	Prairie Provinces	British Columbia
		p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
<u>Male</u>							
	0 - 499	29.5	42.2	29.9	24.0	37.4	25.5
	500 - 749	13.4	16.3	14.9	12.5	11.7	13.0
	750 - 999	12.7	12.2	14.4	12.4	10.5	13.3
	1,000 - 1,249	15.5	12.4	15.7	16.6	13.2	16.9
	1,250 - 1,499	8.2	4.8	7.5	9.7	7.3	8.9
	1,500 - 1,999	11.9	7.1	10.1	14.2	11.2	14.2
	2,000 - 2,499	4.6	2.7	3.9	5.6	4.4	4.9
	2,500 - 2,999	1.6	0.8	1.3	2.0	1.5	1.4
	3,000 +	2.5	1.3	2.3	3.0	2.7	2.0
<u>Female</u>							
	0 - 499	55.0	70.4	61.4	45.8	58.6	50.7
	500 - 749	22.4	17.6	21.6	25.2	21.1	19.7
	750 - 999	12.5	6.9	9.7	15.5	12.3	16.7
	1,000 - 1,249	5.8	3.1	4.6	7.4	4.6	7.7
	1,250 - 1,499	1.9	1.3	1.4	2.6	1.4	2.1
	1,500 - 1,999	1.8	0.6	1.2	2.4	1.7	2.5
	2,000 - 2,499	0.4	0.2	0.2	0.7	0.3	0.5
	2,500 - 2,999	0.1	-	-	0.2	-	0.2
	3,000 +	-	-	-	0.2	-	-

The above table shows the percentage of male and female wage-earners receiving from less than \$500 to more than \$3,000 a year by \$500 income divisions. This information is given for Canada, the Maritimes, Quebec, Ontario, the Prairie Provinces and British Columbia. A comparison may be made here with degree of industrialization in the area.

The marked similarity of gradation of classes is the most striking feature but particularly among the women. Nevertheless, there is considerable difference as from province to province easily noticed from a comparison of Ontario or British Columbia with the Maritimes.

Earnings by Occupation Groups for Canada

Earnings vary not only from place to place but also from occupation to occupation and even within each occupation. No attempt is made here at the latter refinement but the average earnings for male and female wage-earners, 10 years of age and over (14 and over, 1941) are given in Table 10 for 1921, 1931 and 1941. "Weeks employed" are also given for the same occupation groups. From these a fair

idea of weekly wage may be obtained by division. By including the years 1921, 1931 and 1941 some idea of trend in the various occupation groups may be perceived. Data for "all occupations" indicates general movement. However, these are but three years out of 30 and may reflect a number of factors for each group so should not be considered out of their context.

Table 10. Male Wage-earners, 10 Years of Age and Over, by Occupation Groups, Showing Average Annual Earnings and Average Weeks Employed, 1921, 1931, 1941.

	Average Earnings in Dollars			Average Weeks Employed		
	1921	1931	1941	1921	1931	1941
All occupations	1,057	927	993	46.45	41.07	41.31
Agriculture	547	326	300	48.09	43.52	35.46
Fishing, hunting and trapping ..	557	457	409	44.81	40.37	27.50
Logging	770	455	487	44.11	33.66	31.22
Mining, quarrying	1,109	817	1,149	44.36	34.82	40.76
Manufacturing	1,176	1,068	1,120	45.95	41.70	43.61
Building and construction	1,068	881	897	43.28	36.44	36.70
Transportation and communication	1,276	1,112	1,073	47.27	44.40	42.20
Trade	1,340	1,415	1,326	49.32	47.34	46.35
Finance, insurance	2,234	2,449	2,333	50.58	49.15	49.35
Service	1,249	1,404	1,234	49.01	47.16	45.60
Professional	1,667	1,978	1,755	49.79	49.01	47.98
Personal	814	789	737	47.84	44.79	42.44
Clerical	1,249	1,170	1,218	49.53	48.01	46.66
Labourers and unskilled workers.	769	480	602	43.71	32.60	34.40

Earnings by ages

Some idea of relative earnings by age may be had from the summary table included (Table 22). On the average the peak of earning power for wage-earning males is found in the group age 45-54 although the group age 55-59 earned almost as much. Next came the groups 35-44, 60-64 and 25-34. The remaining groups were considerably lower but particularly those below age 20. Average weekly earnings corresponded rather closely with average annual earnings. Number of weeks employed per year increased from 20.5 for age 14 to 39.0 for age 24 and decreased from 41.5 for age 55 to 36.5 for age 69 but remained fairly constant for the intervening ages, 25 to 54, at 43 to 44 weeks per year.

Figures for female wage-earners showed the same trend for weekly and annual earnings although there was even a greater difference between the young and the experienced workers. To judge by "weeks employed", fewer women are out of work, on the average, than men. This is perhaps accounted for by the fact that fewer women are employed in the less stable occupations such as labourers and more in the more stable enterprises which require clerks, stenographers and such.

Table 11. Wage-earners, Average Earnings, Weeks Employed and Average Earnings Per Week, for Male and Female Workers, Canada, 1941

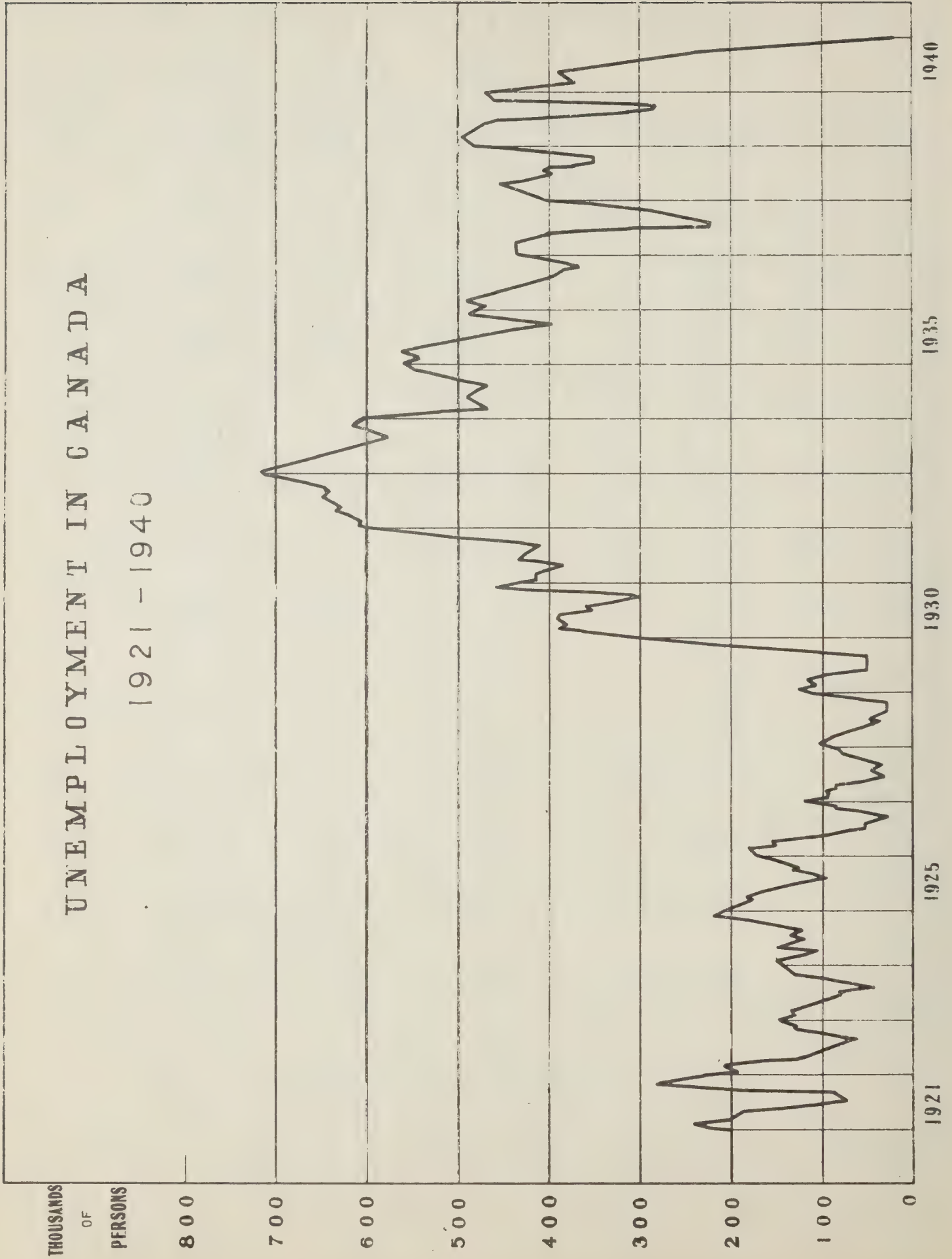
Age		Number of Wage- earners	Average Earnings \$	Weeks Employed	Average Earnings per week \$
All ages -	Male	2,078,734	993	41.31	24.04
	Female	690,727	490	18.80	12.05
14 years -	Male	2,472	121	20.54	5.88
	Female ...	1,354	74	18.80	3.92
15 years -	Male	8,783	155	22.69	6.83
	Female ...	5,164	99	21.34	4.63
16-17 years -	Male	61,838	271	27.93	9.70
	Female ...	44,148	188	27.19	6.91
18-19 years -	Male	96,292	410	33.51	12.25
	Female ...	84,499	289	34.11	8.48
20-24 years -	Male	244,329	632	38.82	16.28
	Female ...	197,149	419	40.93	10.25
25-34 years -	Male	655,001	966	43.34	22.28
	Female ...	192,416	579	44.07	13.13
35-44 years -	Male	442,508	1,179	43.66	26.98
	Female ...	85,812	697	44.73	15.59
45-54 years -	Male	363,456	1,265	43.04	29.35
	Female ...	48,828	701	44.12	15.89
55-59 years -	Male	140,936	1,203	41.47	28.98
	Female ...	14,870	625	43.00	14.54
60-64 years -	Male	95,455	1,106	40.00	27.64
	Female ...	9,364	525	42.18	12.44
65-69 years -	Male	48,299	885	36.59	24.18
	Female ...	5,051	391	41.33	9.47
70 + years -	Male	19,365	886	37.82	23.41
	Female ...	2,072	382	42.52	8.98

3. EMPLOYMENT AND UNEMPLOYMENT

Employment, industrial activity and the general price level in our Canadian economy have been characterized by instability exhibited in periodic booms followed by crisis, recessions and depressions. Before the time of the first world war, these fluctuations possessed a certain degree of regularity forming what were commonly recognized as business cycles. A careful scrutiny of these indicated many common features in the recurring sequence of: depressions, recovery, prosperity, decline; depression, recovery, prosperity, decline, etc. The usual period was

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about four years and as a rule, the unemployment did not last for more than six months although it might extend for one or two years. Consequently, depression unemployment received comparatively little attention before the post-war depression of 1921. It was a matter of "holding on" until conditions righted themselves or "saving up for a rainy day".

Since 1914 the cycles have not appeared with the same regularity. Instead such fluctuations as have appeared have been of irregular duration and apparently more easily explainable in terms of world conditions or cataclysmic events. Explanations by economists have dwelt on the impact of the world war, international monetary and exchange conditions, investment policy, etc. in their attempts to account for the changes. The magnitude and length of the Great Depression of the thirties excelled anything expected or predicted. The stock market panic was the first dramatic indication of a decline, the seriousness of which was hardly realized as it grew steadily worse during 1930 and 1931. The expected up-turn did not appear nor was any satisfactory explanation forthcoming. The bottom was reached in 1932-33 to judge by the position of the national income of Canada and recovery from then until the outbreak of the war was gradual and unsteady.

Employment during the Great Depression followed a course similar to that of general business activity when seasonal fluctuations are neglected. When they are considered, the index is subject to many more ups and downs. These seasonal fluctuations are observable irrespective of whether employment is high or low although they may change in degree. They are in part due to the seasonal nature of such work as logging, fur-trapping, farm labour and in part to the seasonal demand for workers for such manufactured goods as Christmas specialties, canned fruit and vegetables, retooling of machinery for new automobile models, transportation, etc. The high point for employment usually comes in the fall around October while the low point is found in the early spring. This yearly cycle appears regularly although it is considerably modified occasionally at the beginning or end of a depression or boom.

The seasonal nature of our basic industries inevitably causes a certain percentage of unemployment for certain seasons of the year. Carpenters expect to be unemployed in their occupation during some or all of the winter months. Farm labourers realize that a large number from their ranks will be hired from spring to fall, or merely for seasonal work. Such periods of unemployment are considered as a part of such occupations and while they cause some inconvenience to many, the effects are not so serious as when a depression sets in and the workman is unemployed for months longer than anticipated. Short periods of unemployment well spaced are by no means as serious as long periods of equal length. Short lay-offs are expected at intervals in some occupations but after a year without work something has happened to the worker. ^x He is out of touch with the occupation and no longer feels that he belongs. His wardrobe is probably depleted and in every way he is "down at the heel". His morale has been affected. As a corollary the longer a man is without work the harder it is for him to get back to work again. Before entering an industry a youth should carefully consider such possibilities.

Each industry contains marginal units and men who work in these are far more likely to be laid off than those working for companies more firmly established. These marginal producing firms are able to sell their products when there is a strong demand but must curtail production when the demand falls off.

^x For a good discussion of this, based on data from 1931 Census see: Census of Canada, 1931, Volume XIII, Monographs - Unemployment, Ottawa, King's Printer, 1942.

Another consideration is the ease with which a worker may normally be able to find work when he is let out from his usual occupation. If, for example, he is a truck driver he may apply to most industries or trades for there are few who do not require the services of truck drivers of one kind or another. While it is true that some of these must be salesmen as well, others must be able to do heavy work, still others must be diplomatic, etc., in general there are many possible openings. However, qualifications are not high and there is likely to be considerable competition from others who can also qualify. In such an occupation the degree of specialization is not great.

In certain other occupations the degree of specialization is considerable. Years may have been spent in acquiring proficiency and developing the unique skills demanded which may have little counterpart in other jobs. Such a specialist out of work will find few avenues for his talents and may have to revert to the less highly skilled or unskilled occupations. Whether or not he will succeed in these depends on a number of factors other than his abilities in his specialized occupation.

This is most likely to happen where jobs are highly specialized. In the trade and commercial occupations there is considerable similarity between such jobs as executive, manager, buyer, salesman, floorwalker, etc. in different firms with the result that, except in times of severe unemployment, transfer from one job to another is but the work of a few short weeks at most. A manager from one firm can become adept at managing in another firm as soon as he masters the flow of materials and understands the labour situation. A salesman who is successful at selling one brand of goods will likely do well selling another products to the same clientele. And in many of the positions requiring less background, workers may be trained for most jobs in a new firm in a week or two.

3. THE UNEMPLOYED

Employment and unemployment have to do with the labour force productively employed. It might appear from a casual inspection that a study of one would cover the other. Generally this is true, but since the number in the working force is constantly changing some attention is best given to each separately. Also "unemployment" may be minimized by "underemployment" in which workers are put in for short times and paid accordingly. There is considerable difference of opinion as to who should be considered as unemployed..

The word "unemployed" has been used at times to refer to (i) enforced idleness of workers working for pay; (ii) unemployed members of the whole working force; (iii) unemployed members of the whole population of working age. The Canadian census definition refers to the first of these three and its use here is similarly restricted, that is, unemployment will refer specifically to those normally employed who are temporarily without work. It includes only those who are not at work because of no job or temporary layoff - those with no job who should be capable of any available work, but unable to find suitable employment, who are temporarily without work.

There are weaknesses in this viewpoint but no more so than in any of the others. Actually the working force includes owner-farmers, small filling station proprietors, cobblers, etc. of whom it would be practically as impossible to obtain any measure of unemployment, as of the women and children who work at times without pay, as old people at or beyond the usual age of retirement who may be out of a job and for all practical purposes retired. No doubt unemployment thus considered fails to measure the full extent of unemployment but it is understandable, measurable and reasonably accurate.

This method of measurement results in a constantly changing total for the working force. Fluctuations are due to such factors as: (1) entrance of young employees to their first job, (2) elderly, sick or disabled workers retiring from the force, (3) women entering the working force for various reasons or leaving to get married, (4) workers resigning to start for themselves, or workers closing their shops when wages are high to become wage-earners.

Emigration and immigration may influence the number of workers considerably. Where there is no barrier to free movement many workers have a tendency to go where work is to be found. Such movement from province to province is quite common and it is not unusual for workers to move across the border from Canada to the United States. Apart from such farm-workers as begin harvesting in the Northern States and end in the Peace River country, there are those who live in Canada and work in the United States or vice-versa. Canadians in large numbers flock South when jobs are plentiful but return in equally large numbers during periods of depression. While their return may ease employment conditions in the United States, it increases the labour force and unemployment in Canada.

This mobility of the working force on the average varies with age and family ties. Considering all factors, it is greatest at about age 20-35. After that the proportion of married men with families increases. There is also a tendency to feel disillusioned and the adventurous spirit of youth is often lacking. Before the age of 20, many youths lack social and job experience and have not yet severed their home ties.

Entrance of larger numbers of married women into the wage-earning group swell the ranks of the employed when they enter, although they cannot be counted as unemployed before they begin work or if they are let out but have housekeeping duties.

Every country has what may be termed casual labour. Many of these workers count on seasonal jobs and expect to be employed for only a part of the year. Qualifications are not high and usually remuneration is insufficient to ensure a fair level of living throughout the year. It is sometimes difficult to tell where such workers fit into the picture when they are young, old, or not looking for work, being willing to wait until the season changes.

Again, it is difficult at times to draw a line between those in occupations with long vacations, such as teachers and those in seasonal work such as fishers, loggers or farm-labourers. The first are considered employed for the full year while the latter are often hired for seven to nine months.

These are some of the difficulties to be considered in estimating employment.

Of the 2,022,260 male wage-earners at the time of the 1931 Census, 422,078 or 20.87 p.c. were absent from work when the enumerators made their visit. Of this total 161,631 or 38.28 p.c. were classed as unskilled although the unskilled group formed 20.88 p.c. of the total. While the unskilled may be grouped as a class, they are really formed of two classes of workers, those who are attached to an industry and those who are not. In the first group are such as the farm labourers, loggers and miners who, in reality, have some specialized skill although they do heavy and manual labour. Many of the other groups are more indiscriminate and include among their number transients who ride the freights and only accept "odd jobs" and casual workers who reside in some town, village or city and work at whatever jobs are available. Some of these are rather close to the "unemployable group" or marginal workers who are only employed during rare periods of labour shortage.

There were 165,172 in the group who were unattached to any industry of whom more than half (54.54 p.c.) were idle. The other group, some 275,000 in number, had some definite industrial attachment. While the industry may not have recognized them as belonging in some cases, they felt that they were a part of it. This group had fared better as only 27.27 p.c. of their number were idle at the time of the census. This is nearer to the 20.87 p.c. given for idle in all occupations.

Unemployed workers are to be found attached to all industries but the majority are unskilled labour and unattached to any industry. About two-thirds of those not at work on the census date followed the unskilled trades or were engaged in building and construction. The other third for the most part are not such a problem, as the majority are semi-skilled or skilled workers. Nonetheless during periods of high unemployment many highly skilled men find themselves unemployed with no openings available in their chosen field. Under the circumstances, they must change occupation and the simplest thing seems to be to compete in the unskilled work field. While some of them do manage to get work in this way, they have added to the number of unskilled workers and worsened conditions for that group encouraging a possible consequent reduction of wages. Such an expedient is less harmful to the labour situation when a business folds up because it cannot meet competition or when a demand no longer exists for its products than during a major depression.

Maintaining a High Rate of Employment

During the last years of the war, a great deal was heard of "maintaining full employment", keeping everyone employed and other similar expressions indicating that organized planning was being considered to prevent the recurrence of major unemployment.

Unemployment cannot be properly appreciated without knowing something about the forces operating within the occupational and industrial organization. Growth and position of industries in the nation's economy depend to a great extent on supply and demand. In turn supply and demand must consider availability, quantity, production, limitations, trade restrictions, union agreements, etc. while demand takes into account questions of necessity, luxury, steadiness, universality, seasonal fluctuations, markets, whether home or foreign, etc.

In the course of time certain industries have been enabled to create a steady demand which remains fairly constant despite fluctuations of the national economy. Not all units of such industries are equally sound; some are likely to be marginal, some represent attempts to make an entrance into an established channel, while others have become obsolete and are being eclipsed by more enterprising firms. On the whole, the well-organized stable industries have little unemployment. On the other hand, when unemployment does occur it is more likely to be of longer duration and hence more serious.

Some industries meet a seasonal demand. It appears impossible at present to organize a number of these for steady employment. One expedient is to make provision for the transfer of workers to some other industry during the slack season. The difficulty is in arranging such transfer when the work of the two overlaps. Another expedient is for the industry to expand within itself through producing other lines which may be turned out in the otherwise slack season. A third method which has met with some success has been to spread the seasonal work over the year by taking orders ahead of time and allowing discounts for such. This appears feasible for such articles as those required for the Christmas trade which may be manufactured at any time and held, but does not apply to perishable goods.

Other Considerations Related to Unemployment

There is a tendency for industries to become more highly mechanized but to have the machines so simplified in operation that relatively inexperienced operators may use them. Such industries can employ unskilled labourers and teach them all they are required to know in a week or less. In considering 2,216 occupations in 18 industries in the United States, Bell^x found 8.5 p.c. of employees required no training, 59.0 p.c. one week or less, 11.3 p.c. from one week to one month and only 21.3 p.c. requiring more preparation.

This would not have been true some years ago but reflects advance in job techniques and organization during recent years. It minimized need for training for unskilled and semi-skilled occupations. It also facilitates in the readjustment if those who are let out so that they may qualify for other positions. However, it must not be forgotten that a small percentage of jobs still require a fairly long apprenticeship, the requisition of specific skills and a fair amount of formal education.

Necessary instructions on the job in most cases are given either by the foreman or experienced fellow-workers. Less than 5 p.c. begin as apprentices. It is difficult to estimate the number who have received valuable basic training from industrial and trade schools. Probably such training helped graduates to obtain and hold their jobs. None the less, a substantial proportion of industries are now providing much of the necessary training required for the establishment. This has been particularly true since 1939.

The majority of dismissals are not due to inefficiency. Numerous studies would place the number dismissed due to such causes as: incompetence, slowness, spoilage of materials and physically unadapted at from 15 to 25 p.c. Causes of most other dismissals are given as personal defects, lack of job wisdom, or emotional immaturity. Included are such things as: Insubordination, laziness, trouble making, drinking, etc. These are hidden in the census data, which however, may provide numerical data as background for interpretation.

Unemployment and Vocational Choice

In attempting to assess the likelihood of unemployment in any occupation a worker might do well to consider the following:

Is there a seasonal demand for the product or products manufactured and is this coupled with rush seasons in production followed by slack periods?

Is the product one which meets a basic need which is not too greatly influenced by periods of prosperity and depression?

Is the product sold largely in external markets?

Am I considering entering a marginal unit or is the firm well established?

Will the skills which I acquire enable me to fit into other occupations and do they make me so valuable that I shall not need to fear competition from younger competitors with less experience?

Is this type of work found in many industries or is it unique to one or a few?

Is it a "blind-alley" job; can I grow in it, and will I be satisfied with it in ten years?

^x Bell, H.M. Matching Youth and Jobs, American Council on Education, Washington, D.C., p. 58.

Although the discussion of unemployment in this section has been general, employment itself is a specific issue for the individual concerned. It is basic to a political policy for the country at large, an important consideration in business, and one of the most important factors for each individual in fashioning his pattern of life.

4. MOBILITY OF THE MEMBERS OF THE WORKING FORCE

Some idea of the movement of workers from one occupational group to another may be obtained from the 1941 Census returns in which gainfully employed were asked to state their occupation at the time of the preceding Canadian Census, 1931.

This information, together with figures on the mobility of the population, shows a tendency on the part of the majority of Canadians to remain relatively fixed in their abode and occupation. Some two-thirds of them are likely to spend their life as residents of a relatively small locality. Nevertheless, there are times when the working population appears to be on the move, ages at which workers shift from job to job, and certain footloose individuals who are constantly looking for greener pastures. During times of war, youths enter the armed forces and travel considerably. During the second world war with supplies and equipment as important as men, there was a migration of workers to central points. Emphasis on production had changed and the economic demand in manufacturing and ship-building attracted workers from the farm and town but particularly from the Prairie Provinces. Had there been no price ceiling imposed or freezing of wages and men on the job, particularly in farming, the exodus might have reached startling proportions. The full extent of this would not have been reflected in the 1941 Census but some idea of it may be obtained from changed addresses noted in the distribution of ration books.

Two questions were asked on the 1941 Census aimed at discovering the extent of internal migration of the Canadian people from 1931 to 1941. Each was asked to state the number of years he had been resident in the province where he now resided and the number of years of continuous residence in the province where he had previously made his residence. While such data as collected were subject to error in that people forget, and in that persons who moved more than once were only credited with one move, nevertheless the data shed light on the amount of movement and the people moving and may be associated with movement due to the depression of the thirties and that due to readjustment during the first war years. Table 12 gives some idea of length of time in the province of present residence for rural and urban male and female residents of Canada. Table 13 gives the last permanent residence for the emigrant or in-migrant population of Canada, male and female, rural and urban.

Table 12. Per Cent of Population by Years of Residence in Province for Canada, Rural and Urban

		Always	Under 2	2-4	5-9	10-14	15-19	20-24	25 +	Not Stated
CANADA	Total.	72.18	1.47	1.76	2.05	4.31	2.25	2.00	11.48	0.40
	Male..	70.82	1.47	1.69	2.03	4.61	3.36	2.93	12.37	0.72
	Female	73.60	1.46	1.84	2.06	4.00	3.13	3.08	10.56	0.27
RURAL	Total.	75.94	0.99	1.57	1.86	3.90	2.42	1.98	10.24	1.10
	Male..	74.31	1.01	1.53	1.84	4.24	2.78	2.40	11.24	0.61
	Female	77.83	0.96	1.61	1.80	3.51	2.46	2.44	9.07	0.32
URBAN	Total.	69.01	1.88	1.93	2.25	4.67	3.78	3.49	12.54	0.45
	Male..	67.63	1.89	1.83	2.22	4.96	3.89	3.41	13.39	0.78
	Female	70.36	1.87	2.02	2.27	4.38	3.66	3.57	11.71	0.16

Table 13. Province or Country of Last Residence for the 28 Per Cent of the Canadian Population Who Have Not Always Lived in the Province Where They Now Reside

	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Others	British Isles	United States	Europe	Asia	Others
CANADA															
Total ..	0.51	1.76	1.69	6.06	9.62	6.43	8.03	4.86	1.83	0.11	25.73	14.30	15.99	1.24	1.94
Male ..	0.50	1.69	1.55	5.93	9.65	6.45	7.91	4.89	1.98	0.14	24.39	13.52	16.99	1.85	2.56
Female .	0.52	1.83	1.85	6.19	9.54	6.39	8.15	4.82	1.65	0.08	27.31	15.20	14.84	0.53	1.10
RURAL															
Total ..	0.43	1.35	1.24	5.69	8.54	6.53	9.59	5.39	1.73	0.14	19.77	17.27	19.10	0.99	2.24
Male ..	0.44	1.35	1.21	5.74	8.90	6.58	9.39	5.41	1.87	0.17	18.71	16.57	19.60	1.35	2.74
Female .	0.41	1.36	1.28	5.65	8.05	6.45	9.87	5.35	1.54	0.09	21.21	18.21	18.33	0.50	1.70
URBAN															
Total ..	0.56	2.02	1.98	6.29	10.32	6.36	7.38	4.52	1.90	0.10	29.63	12.36	13.98	1.40	1.20
Male ..	0.54	1.93	1.80	6.09	10.24	6.36	6.71	4.51	2.06	0.02	28.52	11.30	15.04	2.21	2.67
Female .	0.58	2.11	2.18	6.51	10.40	6.37	7.18	4.53	1.72	0.07	30.80	13.48	12.83	0.55	0.69

The following points seemed to be well substantiated. More male than female migrants entered rural areas while more female than male migrants changed from rural to urban areas. At ages 20-24 more females than males by 50 p.c. entered urban areas. At ages 45-54 there were 40 p.c. more males than females entering rural areas. Similarly there was a tendency for small families to migrate towards urban areas while large families moved to rural areas. This movement occurred more often while the children were still young. Families with children in their teens appeared to be more firmly entrenched.

There was considerable variation from province to province. Quebec's population was the most stable with a movement of only 2.65 p.c. while British Columbia, younger and more fully urbanized, showed 16.87 p.c. moving. The greatest exodus was from Saskatchewan where the population shrank perceptibly during the decade. The extent may be observed in Table 14 and compared with the data from the ration book count which is found in the same tabular statement.

Table 14. Internal Migration of the Canadian People Showing Gains and Losses for the Province from 1931 to 1941¹ and Estimated Net Civilian Immigration from 1941 to 1944.²

	Total in-migrants 1931-1941	Total out-migrants 1931-1941	Estimated Net Civilian Immigration, 1941 - 1944	Estimated Population 1944
CANADA (9 provinces)	-	-	-	7,000 11,927,000
Prince Edward Island	3,074	5,746	-	7,000 91,000
Nova Scotia	27,646	19,798	+	8,000 610,000
New Brunswick	16,551	26,728	-	19,000 460,000
Quebec	88,369	89,953	-	11,000 3,492,000
Ontario	200,993	123,509	+	58,000 3,954,000
Manitoba	47,571	96,049	-	25,000 730,000
Saskatchewan	30,659	188,204	-	86,000 844,000
Alberta	53,934	95,775	-	15,000 816,000
British Columbia	138,008	55,510	+	90,000 930,000

¹ Data from Census 1941.

² Data from Ration Book count.

The ration book count made by the Dominion Bureau of Statistics has certain inherent weaknesses in so far as giving a complete picture of internal wartime migration. In the first place there are a few sections of the country where goods are not rationed. Second, members of the armed forces did not use ration books except when on leave and are omitted from the tabulations. Third, it was possible for people to obtain ration books where they were visiting at the time the books were issued. This was not necessarily their legal residence as recognized by the census and could introduce specious changes. Fourth, the changes in population here are for provincial areas and do not take into consideration such local movements as changing from farm to town or town to country which may be important considerations for a picture of occupational mobility.

The estimates of population change for the nine provinces from 1941 to 1944 have a probable error of 0.1 p.c. With them are listed the estimated populations of the provinces to give some idea of the proportionate change in the provinces during the period.

These estimates indicate considerable variation in the extent of migration. Nova Scotia gained, probably due to an increase in shipbuilding, shipping and manufacturing. Both Prince Edward Island and New Brunswick lost more than they gained. Quebec lost a small proportion of her population. Ontario gained 58,000, second only to British Columbia. The gain here represented mostly a gain in the larger cities where manufacturing was centered although the civil service expanded in Ottawa to cope with wartime needs.

Manitoba dropped 25,000, while Saskatchewan lost 86,000 which was the largest amount recorded for any province. They represented about one-tenth of the total population and represent a movement from rural to urban dwelling and influx into industry for the most part. Alberta dropped 15,000 and the number would probably have been larger had it not been for the Alaska Highway and Canol Oil Project. The gain in British Columbia of about one-tenth the population represents largely an increase in shipbuilding, shipping and manufacture.

In this migration are certain trends which are more or less constant and the more unusual ones associated with war demands. Some movement results from the trend towards urbanization. From the farms there is a stream of some twenty per cent of youth going to the city, often as a matter of necessity rather than choice as the farm is unable to support them. Girls leave to enter industry or to get married. Boys are more apt to explore the occupation field in search of work which appeals to them more strongly or which gives them the social contacts they wish. Despite such movements there is a tendency for youth to gravitate towards some occupation or field in which they will remain unless compelled by circumstances to change. Whether the choice is the best which might have been made has been largely a matter of fortuitous circumstances and is an issue apart from present considerations.

Mobility of Members from Occupational Group to Occupational Group

Table 15 gives the percentages of gainfully occupied males, 25 and over, in 1941 who had been in the same occupational groups in 1931 and the percentages who had entered from the other occupational groups. In other words, it gives the percentages who were in the same group for the two census years and the groups from which the others came. Table 16 does the same for the females gainfully occupied in 1931 and 1941.

During the ten-year period there were some workers transferring from each of the groups to practically all occupations. The number who transferred varied from an occasional one to several thousand. Table 17 lists those groups which were increased from 1,000 - 4,999, 5,000-9,999, 10,000-19,000 and 20,000 and over, respectively.

From the list of occupations to which 1,000 or more males changed several trends stood out. A goodly number of service, trade, finance, transportation, construction and manufacturing personnel and clerks became "owners, managers or dealers" in retail trade. Several factors contribute to this. The younger people entering the trades keep the pace so fast that the older ones move out as they slow down. Many older workers are looking for a more sedentary occupation with considerable prestige in the community. Others wish to get out of the wage-earning class to become "their own boss". Still others have conscientiously saved up from the first with the intention of managing a shop of their own.

A second trend was from other groups to that of "labourers". In some cases this is but a lateral move such as from labouring in the mines, at construction,

Table 15. Gainfully Occupied Males 25 Years of Age and Over, Showing Percentages of Each 1941 Occupation Group Occupied in Other Occupation Groups in 1931^x for Canada, 1941^{xx} Census

1931 Occupation Group

	Agri- culture	Other primary	Manu- facturing	Con- struction	Trans- portation	Trade and Finance	Service	Clerical	Labourer
1941 Occupation group	861,581	145,163	369,678	162,604	184,852	225,167	210,047	128,551	193,820
Agriculture	84.21	7.43	2.03	2.72	2.74	1.68	1.72	0.98	6.57
Fishing, hunting, trapping ...	0.16	24.05	0.07	0.11	0.21	0.06	0.98	0.03	0.36
Logging	1.32	25.10	0.25	0.29	0.53	0.14	0.22	0.11	2.79
Mining and quarrying	0.91	25.55	0.46	0.62	0.77	0.34	0.40	0.41	1.98
Manufacturing	3.42	4.74	84.43	5.23	6.97	5.22	3.51	5.63	11.58
Construction	1.46	2.07	1.48	81.98	1.83	1.17	0.98	0.89	3.90
Transportation and communication	1.98	2.87	1.89	1.46	75.14	1.99	1.18	2.51	5.76
Trade	1.47	1.13	2.88	1.59	2.74	70.80	2.49	3.59	2.33
Finance	0.06	0.06	0.16	0.13	0.16	9.88	0.34	2.11	0.07
Service	1.56	2.42	2.90	3.09	3.32	4.19	85.95	7.82	5.19
Clerical	2.93	0.43	0.96	0.67	1.62	3.00	1.43	73.34	1.29
Labourers	0.31	4.04	2.36	1.99	3.85	1.38	1.57	1.29	57.90
Not stated	0.21	0.11	0.13	0.12	0.32	0.15	0.13	0.29	0.28
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

^x Not including Yukon and Northwest Territories.

^{xx} Not including those on Active Service.

Table 16. Gainfully Occupied Females 25 Years of Age and Over Showing Percentages of Each 1941 Occupation Group Occupied in Other Occupation Groups in 1931^x, for Canada, 1941^{xx} Census

1931 Occupation Group

	Agri- culture	Other primary	Manu- facturing	Con- struction	Trans- portation	Trade and Finance	Service	Clerical	Labourer
1941 Occupation group	6,696	174	37,758	6	6,578	24,349	146,917	57,918	2,357
Agriculture	85.99	3.45	0.10	-	0.06	0.14	0.32	0.08	0.68
Fishing, hunting, trapping ..	0.03	70.69	-	-	-	-	-	-	0.08
Logging	-	1.15	-	-	-	-	-	-	-
Mining and quarrying	-	2.87	-	-	-	-	-	-	-
Manufacturing	2.69	4.60	91.18	-	1.95	3.71	3.00	1.40	18.05
Construction	-	-	-	100.00	-	0.02	-	-	0.04
Transportation and communication	0.07	-	0.01	-	85.28	0.44	0.13	0.51	0.38
Trade	1.27	2.30	1.95	-	2.33	82.02	1.54	2.60	4.20
Finance	-	0.57	-	-	0.03	1.37	0.03	0.15	0.04
Service	8.93	7.47	5.56	-	5.55	7.98	93.11	4.89	16.09
Clerical	0.61	3.45	0.67	-	4.53	3.91	1.54	90.17	2.33
Labourers	0.04	2.87	0.37	-	0.21	0.28	0.26	0.10	57.27
Not stated or less than 0.01 p.c. of above groups	0.37	0.58	0.10	-	0.06	0.13	0.07	0.10	0.74
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

^x Not including Yukon and Northwest Territories.

^{xx} Not including those on Active Service.

Table 17. Occupations into Which 1,000 or More Men Gainfully Occupied in 1931, Transferred from Each of the Main Occupational Groups between 1931 and 1941

1,000	2,000	5,000	10,000	20,000
<u>Agriculture</u> (36,085 transfers or 15.8 p.c. of the 1931 working force)				
Mine labourers		Miners and millmen		Janitors and sextons
Blacksmiths, forgemen, etc.		Mechanics and repairmen		Metal products workers
Machinists in metal		Carpenters		Salesmen in stores
Wood sawyers		Truck drivers		Labourers
Stationary engineers		Retail merchants, dealers, managers		
Painters, glaziers, decorators			Lumbermen (10,000)	
Sectionmen and trackmen				
Teamsters and carriage drivers				
Purchasing agents and buyers				
Guards and caretakers				
Office clerks				
<u>Other Primary</u> ^x (36,810 transfers or 27.3 p.c. of the 1931 working force)				
Stationary engineers	Farm labourers	Farmers and stock raisers		
Carpenters		Labourers		
Truck drivers				
<u>Manufacturing</u> (57,556 transfers or 14.6 p.c. of 1931 working force)				
Farm labourers	Carpenters	Farmers and stock raisers		
Miners and millmen	Truck drivers	Retail, manager and dealers		
Painters, glaziers, decorators	Store salesmen	Labourers		
Janitors and sextons	Guards and caretakers			
	Office clerks			
<u>Construction</u> (29,296 transfers or 18.0 p.c. of 1931 working force)				
Retail owners, managers, dealers				
Janitors and sextons				
<u>Transportation and Communication</u> (45,957 transfers or 24.9 p.c. of 1931 working force)				
Farm labourers	Farmers and stock raisers	Retail managers, dealers		
Miners and millmen	Mechanics and repairmen			
Store salesmen				
Office clerks				
<u>Trade and Finance</u> (33,513 transfers or 19.3 p.c. of the 1931 working force)				
Mechanics and repairmen	Farmers and stock raisers			
Manufacturers of metal products	Manufactures, owners and managers			
Carpenters	Office clerks			
Truck drivers	Labourers			
Accountants and auditors				
<u>Service</u> (29,506 transfers or 14.0 p.c. of 1931 working force)				
Farm labourers	Farmers and stock raisers			
Store salesmen	Retail, owners, managers, dealers			
	Office clerks			
	Labourers			
<u>Clerical</u> (34,269 transfers or 26.7 p.c. of 1931 working force)				
Manufactures, owners and managers	Retail, owners, managers, dealers			
Commercial travellers	Store salesmen			
Owners, managers, officials in finance	Labourers			
Insurance agents				
Public service officials				
<u>Labourers</u> (81,591 transfers or 42.1 p.c. of 1931 working force)				
Manufactures, foremen	Miners and millmen	Farmers and stock raisers		
Machinists, metal	Mechanics and repairmen	Farm labourers		
Stationary enginemen	Metal products workers	Lumbermen		
Wood and paper products workers	Truck drivers			
Sectionmen and trackmen	Guards and caretakers			
Retail, owners, managers, dealers				
Store salesmen				
Janitors and sextons				
Office clerks				

^x Includes: Fishing, hunting, trapping, logging, mining and quarrying.

Table 18. Occupations into Which 25 or More Women, Gainfully Occupied in 1931, Transferred from Each of the Main Occupational Groups* between 1931 and 1941.

25 - 49	50 - 99	100 - 199	200
Agriculture (938 transfers or 14.0 p.c. of the 1931 working force)			
Dressmaking, sewers	Clothing and textile products	Housekeepers, matrons, stewards	Domestic servants
Retail owners, managers	Cooks	Logging and boarding housekeepers	
Store clerks			
Waitresses			
Manufacturing (3,329 transfers or 8.8 p.c. of the 1931 working force)			
Bookkeepers, cashiers	Barbers, hairdressers, manicurists	Package wrappers, labellers	Domestic servants
Farmers and stock raisers	Nuns	Sales clerks	
Housekeepers, matrons, stewards	School teachers		
Labourers	Charworkers, cleaners		
Lodging and boarding housekeepers	Laundresses		
Nurses	Practical nurses		
Office clerks	Waitresses		
Restaurant owners and managers	Cooks		
Stenographers			
Transportation (958 transfers or 14.7 p.c. of the 1931 working force)			
Clothing and textile products	Domestic servants	Salespeople in stores	
Lodging and boarding housekeepers	Stenographers, typists	Office clerks	
Waitresses			
Bookkeepers, cashiers			
Trade and Finance (4,044 transfers or 16.6 p.c. of the 1931 working force)			
Farmers and stock raisers	Telephone operators	Dressmakers	Domestic servants (400) ^{xx}
Owners and managers, manufacturing	Nurses	Barbers, hairdressers	Housekeepers, stewards, matrons
Metal product workers	Restaurant keepers	Waitresses	Lodging and boarding housekeepers
School teachers	Cooks	Stenographers, typists	Bookkeepers and cashiers
Leather products	Practical nurses		Office clerks
Food products	Labourers		
Wood and paper products	Inspectors and testers of chemicals		
Charworkers, cleaners	Inspectors and graders of metals		
Accountants, auditors			
Laundresses			
Service (1,239 transfers or 6.9 p.c. of the 1931 working force)			
Farmers	Foremen	Farm labourers	Farmers and stockholders
Metal fitters, assemblers	Bakers	Metal inspectors, gaugers	Dressmakers, sewers
Milliners	Bookbinders	Food products	Clothing and textile products (1,700)
Tailoresses	Photographers	Leather products	Metal products
Chemical products	Printers		Telephone operators
Office appliance operators	Spinners, twisters, weavers		Retail, owners and managers
	Rubber products		Canvassers and demonstrators
	Tobacco products		Packers, wrappers, labellers
	Wood and paper products, etc.		Salespeople in stores (1,000)
	Accountants and auditors		Bookkeepers and cashiers
			Office clerks (1,000)
			Stenographers and typists
			Labourers
Clerical (5,692 transfers or 9.2 p.c. of the 1931 working force)			
Farmers, stock raisers	Nuns	Food products	Clothing and textile products
Foremen	Religious workers	Leather products	Telephone operators
Inspectors and gaugers, metal	Postmistresses	Metal products	Retail, owners and managers
Printers	Cooks	Nurses	Salespeople in stores (900)
Tailoresses	Labourers	Barbers, hairdressers	School teachers
Chemical products	Restaurant proprietors	Practical nurses	Domestic servants (500-)
Canvassers, demonstrators	Insurance agents	Waitresses	Housekeepers, matrons, stewards (500-)
Purchasing agents, buyers	Photographers		Lodging and boarding housekeepers
Chemists and metallurgists	Weavers		
Music teachers	Rubber products		
Social workers	Tobacco products		
Public service	Dressmakers, sewers		
Laundresses	Spinners and twisters, textiles		
	Wood, paper and other products		
	Packers, wrappers, labellers		
	Authors, editors, journalists		
	Manufactures, owners and managers		
Labourers (987 transfers or 42.2 p.c. of the 1931 working force)			
Foremen	Housekeepers, matrons, stewards	Domestic servants	
Metal product workers			
Wood and paper workers			
Packers, wrappers, labellers			
Salespeople in stores			
Waitresses			
Office clerks			

* Fishing, hunting, trapping, logging, mining and quarrying and construction are omitted as the transfers were under 50 in number.

xx Numbers are inserted where the number transferred are considerably above 200.

logging, on the farm, etc. to other labour. Often, however, it means a move into a less secure field with more casual employment and at smaller wages. Many entrants into this group feel that they have lost something in that they no longer belong to an industry. This transfer is often associated with approaching age, or technological shifting as demands change and certain industries lose their importance. Specialists in certain semi-skilled or skilled lines requiring narrow specialized skills often revert to a lower order of skill when let out as there is no longer a demand for their abilities and little opportunity for them to qualify for other work.

A third trend was in the opposite direction. Aggressive men with ability, by dint of extra work and planning, prepared themselves for work that was more in keeping with their desires and interests. For example, two men classed as labourers in 1931 were grouped under "professors and college principals". Three others as "physicians and surgeons". More than 100 labourers in 1931 became "owners, managers, and dealers - wholesale" by 1941 and 1,683 held similar positions in retail business. Some of the labourers in June 1931 were probably "putting themselves through college" but this would be true of only a limited number.

A fourth trend was observed wherein transfers were made from one group to others in which the skills learned in the first were useful in the second. Among such were farmers who became truck drivers, carpenters, teamsters, carriage drivers, blacksmiths, etc. Also men in trade and finance transferred to become office clerks, accountants and auditors. Similarly clerical workers became public service officials, insurance agents, etc.

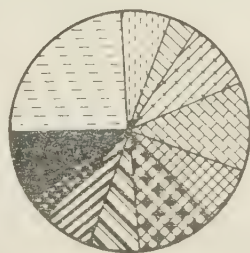
The picture of women workers is much the same but the occupation list is more limited in scope and numbers employed much smaller. Expansion in the field of woman's endeavour accounts for many transfers.

Members transferred in considerable numbers from all groups to become domestic servants. In some cases, this was effected to obtain easier work, but in many others of necessity. "Lodging and boarding housekeepers" accounted for many of those who changed jobs as did "housekeepers, stewards and matrons".

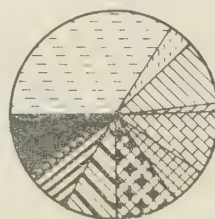
DISTRIBUTION OF GAINFULLY OCCUPIED MALES 14 YEARS AND OVER BY OCCUPATION GROUPS

CANADIAN PROVINCES 1941

NOVA SCOTIA

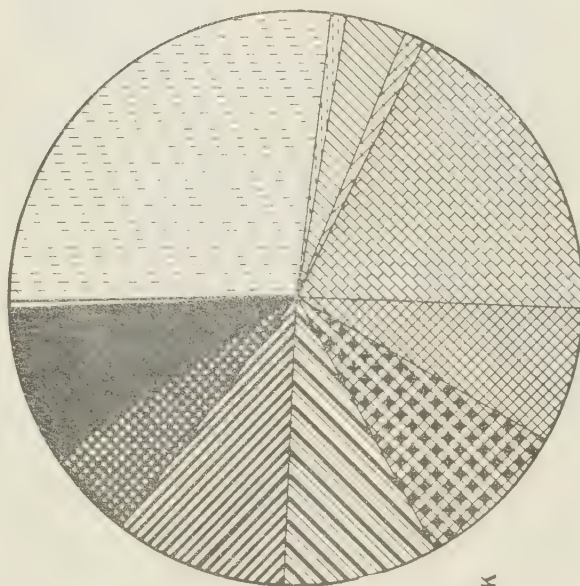


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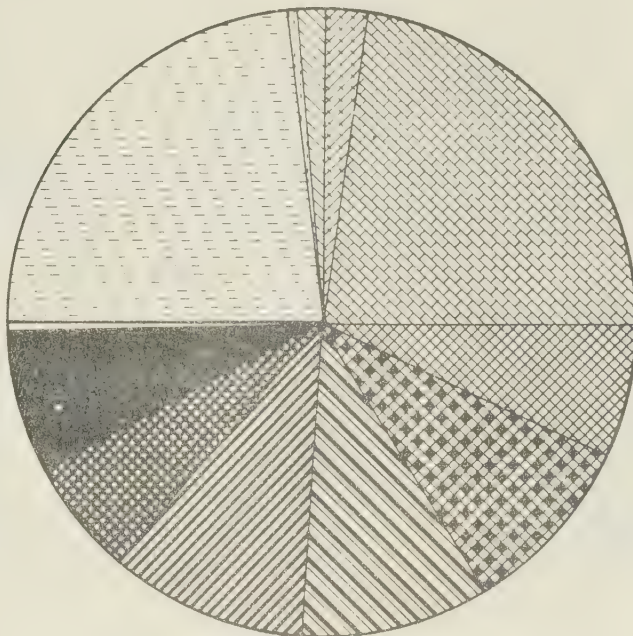


NEW -
BRUNSWICK

QUEBEC



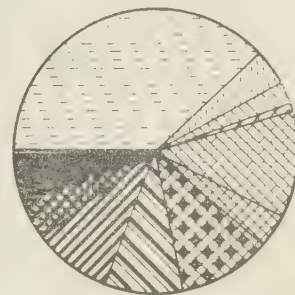
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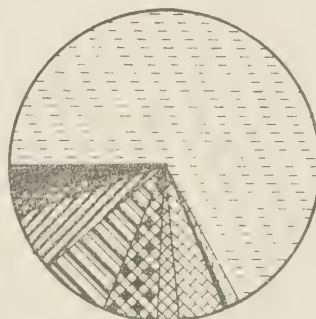
LEGEND

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- FISHING AND TRAPPING
- LOGGING
- MINING AND QUARRYING
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- CONSTRUCTION
- TRANSPORTATION
- TRADE AND FINANCE
- SERVICE
- CLERICAL
- LABOURERS
- NOT STATED

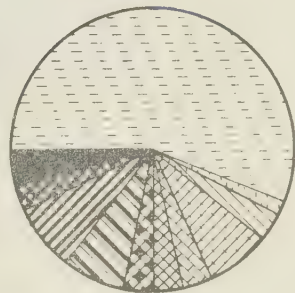
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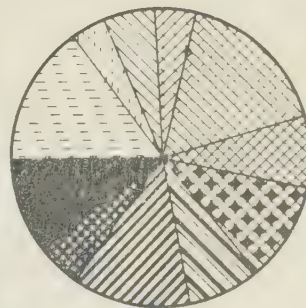
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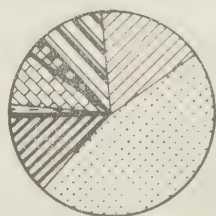


DISTRIBUTION OF GAINFULLY OCCUPIED FEMALES 14 YEARS AND OVER

BY OCCUPATION GROUPS

CANADIAN PROVINCES 1941

NOVA-SCOTIA



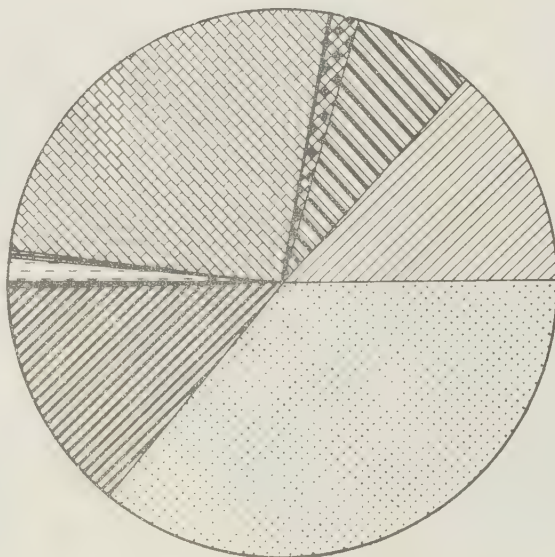
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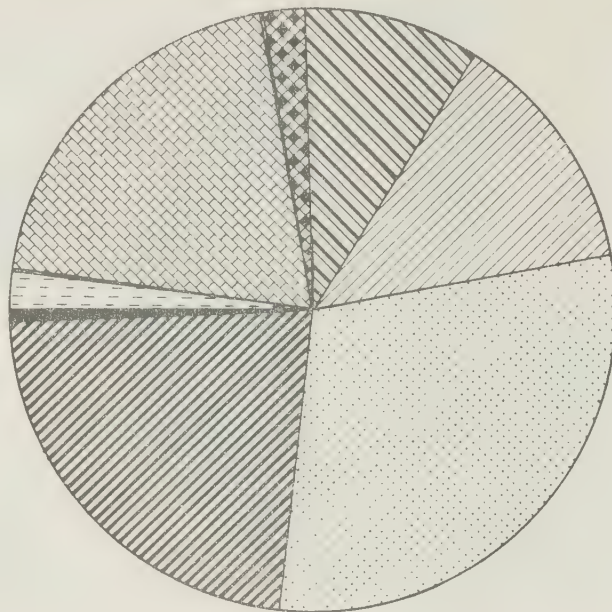
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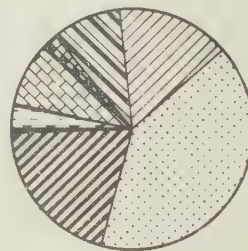
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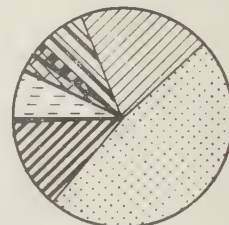
LEGEND

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- MANUFACTURING
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- LABOURERS
- NOT STATED

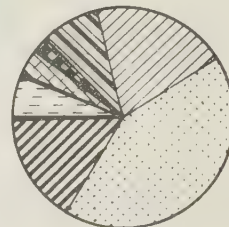
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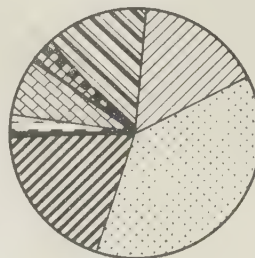
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BRITISH-COLUMBIA



5. YOUTH AND AGE

Census data on unemployment include those young people who have had work and lost it but not those who have left school but who have been unsuccessful in obtaining work. The result is that census figures on unemployment among youth are minimal.

Similarly there are many youth in school (except when there is a shortage of workers) who are in attendance because they cannot obtain work outside. Many of these are among the repeaters in high school who fail in subjects year after year. School is but a stop-gap for them. They hope for a work opportunity. Yet, they are not unemployed. Their case is, however, perhaps not as serious as those who have severed their connection with school but do not yet belong to the working force.

It is not unusual for high school drop-outs or even graduates to suffer a period of unemployment before getting settled in an occupation. The drop-outs spend more time looking for work as a rule. These gaps, interspersed between odd jobs, may range from a few months to two or three years. During wartime, the total is extremely short but during the last depression period, the years stretched out to five or six in many cases. The gap varies depending on age, training, personality, location, contacts of the boy and conditions during the year in which he left school.

The first job attempted by a youth usually does not last long. Either it is temporary or he is unable to adjust himself to the requirements of the job. In normal times, it is not unusual for a young worker to try various kinds of work but in the course of a year or so to obtain enough experience in some one to feel he is experienced therein and belongs in that occupation. This is often considered part of the process of becoming an adult.

The high school graduate fares somewhat better but there is still a gap before he is adjusted to a job. But as the number of high school graduates becomes greater, the certificate loses its premium. Nevertheless the high school graduates are a selected group. Some of them have special vocational training which is an advantage in securing employment. However, increasing the number of trade schools would not ease the graduates' employment problem where there are but a limited number of positions to be filled.

Juvenile Employment and Unemployment

Many young people leave school to accept "dead-end" jobs suited to youth only, such as page boys, newsboys, bellhops, delivery jobs by hand or bicycle, delivery of telegrams, etc.; other are more fortunate. The fifty occupations with the largest percentage of youth (males under 20) employed were selected from 1931 Census in Table 19. Nineteen of the fifty were apprenticeship occupations. Unemployment in these for the apprentices compared favourably with unemployment for the master craftsmen.^x Apprentices were not laid off first.

There was no significant difference between average (median) unemployment in the apprenticeship occupations and others in the fifty listed. Unemployment is apparently more closely related to stability of the organization and steadiness of demand.

Table 20 lists the fifty occupations which employed the largest number of males and females aged 14-19 in descending order of magnitude and gives the number aged 16-24 employed in the same occupations at the time of the 1941 Census.

^x Census of Canada, Volume XIII pp. 240 ff.

Table 19. Fifty Occupations with Highest Percentages of Youth (Males Under 20 Years of Age), also Showing the Number of Weeks Lost per Youth, 1931.

Occupation	Per cent Youth Employed	Weeks lost per Youth
Bakers' apprentices	88.1	7.55
Boot and shoe makers' apprentices	86.6	9.97
Cabinet and furniture makers' apprentices	85.3	9.25
Tailors' apprentices	84.0	10.99
Painters' apprentices	83.2	13.79
Barbers' and hairdressers' apprentices	82.7	9.27
Messengers (transportation, communication)	78.9	7.65
Upholsterers' apprentices	75.9	14.81
Sheet metal workers' apprentices	75.0	12.38
Moulders' apprentices	72.8	12.95
Carpenters' apprentices	72.3	12.80
Jewellers' and watchmakers' apprentices	72.1	6.07
Plasterers' and lathers' apprentices	71.7	15.71
Printers' and bookbinders' apprentices	70.7	4.96
Newsboys	68.2	4.69
Electricians' and wiremen's apprentices	67.3	10.28
Plumbers' apprentices	66.6	10.28
Brick and stone masons' apprentices	66.6	16.62
Blacksmiths' apprentices	62.5	8.97
Machinists' apprentices	61.8	9.69
Boilermakers' apprentices	61.7	14.30
Miscellaneous transportation and communication ..	48.3	9.08
Machine tenders	44.5	8.01
Ushers	42.9	8.87
Miscellaneous recreational service	38.2	15.67
Bootblacks	36.5	13.92
Spoolers, warpers and beamers	36.0	11.20
Spinners	28.8	11.61
Button makers	27.0	13.63
Office appliance operators	27.7	5.11
Deliverymen and drivers	26.9	9.19
Miscellaneous textiles	25.6	11.58
Stenographers, typists	24.4	6.60
Knitters	23.9	10.41
Miscellaneous, unspecified	23.2	10.68
Haulage workers, mining	21.8	23.53
Sewers, seamstresses, (not in factory)	21.8	10.19
Box, basket and packing case makers	21.5	12.39
Miscellaneous, tobacco products	21.5	11.03
Miscellaneous products, manufacturing	20.8	8.27
Packers, wrappers, labellers	20.7	11.79
Domestic servants	20.1	8.79
Paper box, bag and envelope makers	20.0	10.41
Miscellaneous, printing, publishing, bookbinding ..	19.6	4.96
Farm labourers	19.2	6.50
Miscellaneous, trade	18.8	3.66
Confectionery and biscuit makers	18.5	12.30
Sewers, shop and factory	17.9	14.20
Electrical appliance manufacturing	17.5	14.14
Weavers	17.2	10.83

These were primarily the occupations of youth. Omitted are the numbers at school - not a large number during most of the latter age range - and those who never had a job.

While some attempt might be attempted at classifying these in such categories as "dead-end", "stop-gap", "stepping-stone", "apprenticeship", "no-pay", some of the occupations, such as the most common for males "farm labourer" might properly be placed in any of the classes depending on the individual concerned.

Table 20. Fifty Occupations Which Employed the Largest Numbers of Youth from 14-19, 1941 Arranged in Descending Order and the Number 16-24 for the Same Occupations.

	14-19	16-24
Male -		
Farm labourers	142,978	215,574
Labourers (not in agriculture, fishing, mining, or logging)	29,358	60,861
Office clerks	12,556	28,768
Salespeople in stores	10,640	24,290
Messengers	8,538	7,683
Lumbermen	7,507	19,154
Metal products	5,382	12,956
Truck drivers	4,752	17,397
Mechanics and repairmen, n.e.s.	4,948	13,713
Machinists	4,056	9,799
Clothing and textile products	3,676	7,227
Fishermen	2,983	6,620
Shipping clerks	2,421	5,730
Farmers and stock raisers	2,332	25,022
Carpenters	2,164	6,845
Hunters, trappers, guides	1,938	3,976
Wood and paper products	1,913	4,287
Leather products	1,911	3,548
Deliverymen and drivers, n.e.s.	1,743	1,978
Miners and millmen	1,554	7,150
Painters, glaziers, decorators	1,472	4,486
Domestic servants, n.e.s.	1,369	2,042
Packers, wrappers	1,331	2,356
Electricians, wiremen	1,311	3,612
Food products	1,304	3,058
Printers	1,287	2,715
Labourers, mines, quarries	1,213	3,371
Teamsters and carriage drivers	1,085	2,839
Bakers	1,079	2,321
Fitters and assemblers, metal	1,055	2,991
Welders and flame cutters	972	3,076
Plumbers and pipe fitters	970	2,628
Waiters	929	2,442
Sheet metal workers, tinsmiths	913	2,222
Boilermakers, platers, smelters	896	1,864
Weavers, textiles	886	2,001
Seamen, n.e.s.	868	1,960
Bookkeepers and cashiers	849	3,210
Butchers and meat cutters	764	2,332
Sectionmen and trackmen	672	1,960
Rubber products producers	660	1,559
Chemical products producers	659	1,917

Table 20. Fifty Occupations Which Employed the Largest Numbers of Youths from 14-19, 1941 Arranged in Descending Order and the Number 16-24 for the Same Occupations - Concluded.

	14-19	16-24
<u>Male (con.) -</u>		
Stenographers, typists	625	1,661
Draughtsmen, designers	594	1,592
Cooks	577	1,584
Non-metallic products	500	1,046
Porters	488	1,013
Accountants and auditors	417	2,664
Chauffeurs and Taxi drivers	384	1,868
Woodturners and planers	370	784
TOTAL, All Occupations	297,666	617,956
<u>Female -</u>		
Domestic servants	49,675	88,396
Clothing and textile products	13,389	27,926
Stenographers, typists	11,669	38,505
Salespeople in stores	10,052	28,337
Waitresses	6,145	14,409
Packers, wrappers	4,214	8,095
Housekeepers, matrons	3,368	8,740
Metal products	2,777	5,723
Teachers, school	2,564	17,736
Farm labourers	2,354	2,956
Leather products	2,207	4,112
Spinners, twistors	1,021	1,885
Barbers, hairdressers	1,091	4,466
Wood and paper products	1,241	2,524
Food products	1,341	2,665
Laundresses	1,448	3,335
Telephone operators	1,696	4,795
Nurses-in-training	1,979	10,538
Inspectors and gaugers, metal	989	2,535
Weavers, textiles	837	1,669
Dressmakers and sewers	642	1,856
Rubber products manufacturers	642	1,367
Cooks	594	2,153
Nurses - practical	549	1,705
Office appliance operators	375	1,334
Non-metallic mineral products	326	638
Chemical products	308	723
Fitters and assemblers, metal	303	633
Cleaners and dyers	278	701
Inspectors and graders, trade	277	458
Shipping clerks	269	582
Bookbinders	232	534
TOTAL, All Occupations	144,560	351,862

Unemployment and Age

Whereas one would expect unemployment to rise sharply with age increase above 50, unemployment figures do not indicate such a rise. This is in part owing to a depletion in the ranks of the workers due to ill-health, death, etc. But a more important factor is a tendency on the part of older men to consider themselves as retired rather than out of work. Considering those who still attest belonging to the labour force, census data indicate that the percentage unemployed for more than a year among those from ages 55 to 64 is considerably above that for ages 35-44. The risk of being unemployed at the older age is greater - perhaps half as much again; and the chance of losing one's job is about the same on the average. Hence the chance of an older person obtaining employment again is considerably less.

It is sometimes difficult to decide whether an elderly man should be classed as unemployed or retired. He may have been laid off and be willing to accept another suitable job but the months go by with no job in sight. In the 1941 Census such men were classed as retired when the enumerator decided that they would probably never again obtain a job.

Another factor having an increasing influence on employment in later life during the inter-censal period 1931-1941 was provision for old-age pensions for all needy above 65 and a changing attitude towards accepting them.

Graphs in this report indicate a diminution with age in the number employed but do not give a complete picture inclusive of the number in the population, disabled, retired, etc.

Unemployment in Youth and Age as Indicated from Benefit Years Established Under the Unemployment Insurance Act

Unemployment Insurance data are now available from 1942 to the present and tabulations have been compiled by the Dominion Bureau of Statistics in the main from materials supplied by the Unemployment Insurance. These compilations shows the following: The number receiving insurance books; the number establishing benefit years, that is, eligible workers who have contributed for 180 days during the preceding two years who are now without work due to circumstances beyond their control and who otherwise meet specified requirements. It includes, further, those whose benefit years have been terminated whether by exhaustion of rights or otherwise. Such information is available for age groups, male and female, geographical areas, etc.

Table 21 gives the number of persons insured for specified age groups, male and female and the per cent who lost their jobs, applied, and were found eligible for benefit rights. It also shows that from ages 20-24 there is considerable loss of jobs, then the percentage decreases until age 39 and increases from age 44 to 65 and over, but particularly from age 50 and up.

Table 22 shows that not only do a greater percentage of the young and elderly workers establish benefit years (lose their jobs) but have them terminated by exhaustion, that is, have their benefits used up, indicating that it is considerably more difficult for such to get new jobs even during periods of relatively full employment such as found in 1944 and 1945.

Table 21. Number Insured and Per Cent Who Established Benefit Years by Age Groups

Age Group	1 9 4 4				1 9 4 5			
	M a l e		F e m a l e		M a l e		F e m a l e	
	No. of	Per cent	No. of	Per cent	No. of	Per cent	No. of	Per cent
	Insured	Est.Ben.	Insured	Est.Ben.	Insured	Est.Ben.	Insured	Est.Ben.
	Persons	Years	Persons	Years	Persons	Years	Persons	Years
TOTAL -								
ALL AGES	1,447,530	3.35	762,320	2.41	1,446,640	9.14	757,120	6.68
Under 20 ..	168,720	2.09	194,410	1.61	161,860	6.14	186,400	3.24
20 - 24 ...	112,920	4.41	188,370	3.38	122,160	10.96	189,720	8.47
25 - 29 ...	149,770	2.89	111,160	2.83	138,560	8.39	107,860	7.74
30 - 34 ...	182,190	2.64	78,560	2.50	177,320	8.74	79,060	8.29
35 - 39 ...	174,820	2.65	65,600	2.08	175,160	7.67	62,460	7.41
40 - 44 ...	159,490	2.99	47,970	2.02	162,540	7.88	49,640	6.97
45 - 49 ...	138,670	3.14	32,050	2.02	135,020	8.85	33,720	7.62
50 - 54 ...	121,300	3.30	19,890	1.91	121,480	8.34	20,900	6.44
55 - 59 ...	106,760	3.99	11,740	2.03	108,680	9.27	12,940	6.09
60 - 64 ...	70,880	5.33	5,290	2.08	77,480	11.58	6,020	6.71
65 and over.	54,420	9.38	2,600	2.58	59,520	23.97	2,900	9.90
Not given ..	7,590	0.12	4,780	0.06	6,860	1.36	5,500	1.02

Table 22. Number of Benefit Years Terminated by Claimants
Using up Their Benefit Rights

Age Group	1 9 4 4		1 9 4 5	
	Benefit Years Terminated by Exhaustion of Rights		Benefit Years Terminated by Exhaustion of Rights	
	As a		As a	
	Number of Years	Percentage of Benefit Years Established	Number of Years	Percentage of Benefit Years Established
TOTAL - ALL AGES	7,149	10.68	17,183	9.40
Under 20	629	9.45	1,772	11.09
20 - 24	831	7.33	2,656	9.01
25 - 29	544	7.27	1,552	7.77
30 - 34	530	7.82	1,346	6.10
35 - 39	509	8.48	1,307	7.23
40 - 44	502	8.75	1,203	7.39
45 - 49	507	10.15	1,106	7.62
50 - 54	484	11.04	986	8.59
55 - 59	586	13.04	1,047	9.64
60 - 64	630	16.21	1,137	12.12
65 and over	1,397	26.96	3,071	20.89

6. GAINFULLY OCCUPIED WOMEN WORKERS

The working force includes both men and women but while the proportion of the two in the general population is about equal, census returns have always shown women as forming less than one-fifth of the gainfully occupied.

Table 23. Gainfully Occupied, Male and Female, by Census Years 1901 to 1941

	1901	1911	1921	1931	Including Active Ser- vice, 1941	Excluding Active Ser- vice, 1941
Total Population ..	5,344,096	7,191,624	8,775,164	10,363,240	11,489,713	11,489,713
Population (10 years and over)	4,081,755	5,519,652	6,668,913	8,158,972	9,396,047	9,396,047
Gainfully occupied. (10 years and over)	1,782,852	2,723,634	3,173,169	3,927,230	4,510,535	4,195,951
Per cent of popu- lation 10 years and over	43.68	49.34	47.58	48.13	48.00	44.66
Male workers	1,544,883	2,358,813	2,683,019	3,261,371	3,676,563	3,363,111
Per cent of popu- lation 10 years and over	73.87	79.49	77.54	76.69	76.12	69.63
Female workers ..	237,949	364,821	490,150	665,859	833,972	832,840
Per cent of popu- lation 10 years and over	11.95	14.29	15.27	17.04	18.26	18.24

Note: Yukon and Northwest Territories excluded except in 1901. Indians excluded in "population" but not in "gainfully occupied" in 1901.

From 1901 to the present, each ten-year period has shown an increase in female employment, the increase being from 11.95 p.c. in 1901 to 18.2 p.c. of the labour force in 1941, inclusive of those in active service.^x

From the beginning of the war to 1944 the number of women gainfully occupied increased as did the number enlisted in the armed forces. The number of men and women in industry for selected dates from 1939 is estimated as follows:

	October 1939	October 1941	October 1943	October 1944	April 1945
Men	3,104,000	3,427,000	3,216,000	3,241,000	3,250,000
Women	689,000	787,000	1,060,000	1,077,000	1,046,000
Farm Women (14 - 64 years)	805,000	785,000	765,000	785,000	800,000

^x The 1901 data are for gainfully employed women from 10 years up and those for 1941 for women from 14 years up. However, since the number of females in 1921 from 10 to 14 was but 430, it influenced the percentage by only 0.05 p.c.

The number of women gainfully employed in Canada in 1944 was above the million mark and formed about one-quarter of the working force. There were almost twice as many employed in industry or in the armed forces, 1944, as there were at the beginning of the war while about one worker in four in war industries was a woman. By April, 1944 our improved position on the war fronts was beginning to be felt. There was a switch over from war to peacetime activity in some factories as orders were cancelled and production stopped. The number of women employed showed a decrease for the first time since the wartime rise began. This was to be expected although information is lacking as to the number of voluntary resignations and the number caused by change in demand.

During the war period women took over men's jobs in many industrial or business positions, the range extending from the operation of a rivetting gun to teller in a bank. Comparatively few occupational classes listed by the 1941 Census showed no women workers. Since that time, certain occupations which had always been considered exclusively male have lost that uniqueness. On the other hand, the number of women listed in certain other occupations was so small as to be of no consequence industrially. Occupations with less than 25 women members in 1941 were as follows:

OCCUPATIONS IN WHICH THERE WERE FEWER THAN TWENTY-FIVE WOMEN EMPLOYED,
1941

Baggagemen and expressmen	Mining: Foremen
Brakemen	Labourers (mines, quarries)
Captains, mates, pilots	Oil-well drillers
Conductors - steam railway	Rock drillers
Despatchers - train	Blacksmiths
Engineering officers	Boiler firemen
Firemen and trimmers on ships	Cabinet and furniture makers
Linesmen and cablemen	Coopers
Lockkeepers, canalmen, boatmen	Furnacemen
Locomotive engineers	Annealers and heat treaters
Locomotive firemen	Machinists
Longshoremen - stevedores	Millers
Radio station operators	Millwrights
Seamen	Paper makers
Sectionmen and trackmen	Power station operators
Operators, electric railway	Rolling mill operators
Switchmen, etc.	Sawers - wood
Yardmen	Stationary engineers
Bootblacks	Stone cutters and dressers
Engineers, civil	Toolmakers
Engineers, electrical	Architects
Engineers, mining	Transportation inspectors
Firemen (dept.)	Aviators - not in Armed Forces
Farmers, stock raisers	Bus drivers
Logging: Owners and managers	Deliverymen
Foremen	Teamsters, carriage drivers
Foresters, timber cruisers	Hawkers and pedlars
Lumbermen	Newsboys
	Pattern makers
	Motion picture projectionists

The women in wartime industry were not the "working girls" of previous decades but presented a wide range of womanhood of all ages and from all walks of life. More than one-quarter of them were married; many were mothers, some grandmothers.

Another forty-seven thousand enlisted in the armed forces where they relieved men for actual combat duty. Much of the work they did was similar to occupations in the industrial world. Many of these women will be looking for similar jobs in business and industry when they are discharged.

A Toronto wartime survey indicated that slightly less than one-half of the married women and only five per cent of the unmarried women then working expected to withdraw from the labour market. Stenography was the most highly favoured postwar job according to a limited survey in the R.C.A.F. It was followed by a good many others including the professions. These figures should not be taken too seriously as the number of women employed in industry is dependent on so many factors such as availability of jobs, public opinion, relative salaries or wages, etc. that it is impossible to predict postwar employment opportunities for women or participation of women in industry. The same is true for the professions, service occupations and even labouring jobs.

Trend in the Number of Women in Selected Occupations, 1921 to 1941^x

When jobs are scarce there is a tendency to accuse women of taking men's jobs and to soliloquize on women's place being in the home. The assumption is that women may be employed at lower wages because they have only themselves to support and many employers will take advantage of this to keep wages down. The correctness, or incorrectness, of such contention may be checked somewhat from analysis of the number and percentage of males and females employed in various occupations during the past twenty years.

The compilation to follow lists the gainfully occupied females 10 years of age and over (14 and up in 1941) by selected comparable occupations for Canada according to the number employed at the census dates 1921 and 1941. Group 1 contains occupations in which the number of females employed in 1941 was less than in 1921. Group 2 contains occupations in which the number was the same or not more than 130 p.c. of that in 1921, an increase which corresponds roughly with the increase in population for the period. Group 3 occupations in which the increase was from 130 p.c. to 199 p.c.; Group 4 from 2 to 4 times and Group 5, more than 4 times.

Numbers after the name of the occupation indicate similar changes in the number of males employed at similar work. For example, the first occupation listed, bookbinders, is followed by a "1" which shows that there were fewer males employed in it in 1941 than in 1921. Furriers in Group 2 is followed by a "4" indicating that from 2 to 4 times as many males were employed as furriers in 1941 as in 1921.

GROUP 1. Some occupations in which fewer women were employed in 1941 than in 1921

Bookbinders, 1^{xx}
Dressmakers and Sewers
Milliners (not in factory)
Tailoresses (Tailors, 1)

Telegraph operators, 1
Musicians and Music Teachers, 3
Nuns (brothers, 3)
Labourers, not in fishing, logging,
mining, 1

^x See "Occupational Trends in Canada, 1901-1941. Occupations and Industries, Bulletin No. 0-6 55 pp. rotaprinted. Dominion Bureau of Statistics.

GROUP 2. Some occupations in which the same number were employed or not more than 130 p.c. of the 1921 number

Weavers, 4	School Teachers, 4
Purchasing Agents or Buyers, 3xx	Laundresses (Laundrymen, 1) xx

GROUP 3. Some occupations in which the number of females increased from 130 p.c. to 199 p.c. of the 1921 number

Furriers, 4	Other Trade Occupations, 3
Photographers, 3	Dentists, 3
Printers, 3	Draftsmen, designers, 3
Spinners and Twisters, 4	Nurses
Clothing and Textile Products 3 xx	Policemen, Detectives, 3
Food Products, 3 xx	Actresses, Sportsmen, 3
Leather Products, 2 xx	Ushers, 1
Liquor and Beverages, 3 xx	Charworkers, 5
Rubber Products, 1 xx	Cleaners, Dyers, 3
Tobacco Products, 1 xx	Domestic servants, Housekeepers, 3
Wood and Paper Products, 3 xx	Practical nurses, 3
Wholesale and Retail Dealers, 2	Elevator Tenders, 4
Clerical Office Workers, 3	Janitors, Sextons
Sales Persons in stores, 3	

xx 1921 figures not available - 1931 figures used for comparison.

GROUP 4. Occupations in which the number of females increased 2 to 4 times

Farm labourers, 2 (1921 figures for females possibly too low)	Lawyers, 3
Chemical Products Manufactures, 4	Postmistresses, 3
Non-metallic Mineral Products, 3	Public Service Officials, 3
Inspectors, Graders, Samplers, 3	Authors, Editors, Journalists, 3
Packers, Wrappers, Labellers, 2	Social Welfare Workers, 3
Insurance Agents, 3	Physicians, 3
Real Estate Agents, Dealers, 1	Owners, Managers, Hotels, Restaurants, Laundries, 3
Artists and Art Teachers, 4	Cooks, 3
Chemists and Metallurgists, 4	Porters, 1
	Waitresses, 4

GROUP 5. Occupations in which the number of females increased more than four times from 1921 to 1941

Inspectors (chemical, metal), gaugers, 4
Bakers, 3
Barbers, hairdressers, manicurists, 4

- Note: 1. Occupations in which the number decreased from 1921 to 1941.
 2. Occupations in which the number remained constant or increased less than 30 p.c.
 3. Occupations in which the number increased from 130 p.c. to 200 p.c.
 4. Occupations in which the number increased from two to four times.
 5. Occupations in which the number increased more than four times.

While data for many of the census occupations could not be included in this grouping, those listed show little substitution of women for men. Rather, it would seem that certain new jobs were created which were suited for women, such as, office work, inspectors, hair dressing and beauty treatments. On the other hand, males showed a greater numerical gain than women as teachers, charworkers, janitors, etc.

Several things must be kept in mind in making comparisons. First, whether the actual number of men and women employed increased, decreased or remained constant during the twenty-year period. Second, whether, where there was an increase, it was greater or less than the increase in population from 14 up, or number employed. Whether the increase was proportionately greater among the male or female members of the group.

These data reveal the situation only up to 1941. Had they continued through the war years, greater replacement would have been found. But, whether or not such substitution is of a temporary or permanent nature cannot be ascertained at present.

7. OCCUPATIONS IN THE TWENTY-SEVEN CITIES OF 30,000 POPULATION OR OVER.

Cities emerge to meet an economic demand or demands. On the Prairies it may be distributions, on the Coast shipping, ship-building or fish processing, etc. while elsewhere manufacturing and mining may provide the chief demand. Growth in one or more the such occupations necessitates or attracts many other occupations to meet the needs of those who come in response to the primary industry. Among the subsidiary ones are construction, trade and finance, clerical service, professional and personal service, etc.

Youth developing in any one city will find more opportunities in certain occupations than others and may even have to move to some distant city if the work in which they are interested is not carried on in their home city or its environs.

Rate of growth of cities is dependent both on long term factors and short-time abnormal demands. Steady demands have comparatively little effect on a city after it is once established. However, most Canadian cities are still growing in response to an expanding economy. For the most part this growth is fairly consistent and the percentage distribution of the gainfully occupied is fairly constant from decade to decade to decade. On the other hand certain insistent demands arising out of war situations, discovery of ore fields, production of waterpower, etc. may result in what is almost a mushroom growth of a city. Similarly when ore seams run out, war demands end, etc., there is the possibility of certain industries ending and cities shrinking.

Data in this report are for census years and do not register the peak reached in war-time production although changes are observable between percentages for 1931 and 1941. The four statements included give average percentages for the 27 cities of 30,000 or more population as well as data for the separate cities and may be used to indicate changes in occupations in one city or to compare percentages in two cities.

Primary occupations could not be expected to employ a large personnel in the cities. None the less 31.6 p.c. of the males in Sudbury were so occupied in 1941. Vancouver, Victoria and Edmonton followed while Verdun and Outremont had, the least, with 0.4 p.c. so occupied.

Percentage in manufacturing varied greatly, slightly more than 40 p.c. being so occupied in Hamilton, Windsor, St. Catharines and Kitchener and less than 17 p.c. in Regina, Victoria, Saskatoon, Halifax. Percentages in construction were lower in all cities, Montreal, Quebec, Verdun and Victoria ranging between 10 and 11 p.c. Percentage in transportation varied from 21.5 p.c. in Saint John to 4.8 p.c. in Outremont. More than one-third, 33.5 p.c., in Outremont were in trade and finance, but only about 8.5 p.c. in Fort William. Service ranked highest in Ottawa, 22.2 p.c. and lowest in Fort William although professional service was higher in Outremont and personal in 13 other cities. Clerical occupations were higher in Ottawa where 21.4 p.c. were so occupied and lowest in Sudbury, 4.6 p.c.

Percentage of gainfully employed females also varied considerably from occupation to occupation for the same cities. Less than 0.2 p.c. of workers were found in the primary or construction groups in any city while the labouring group was not above 4.1 p.c. in any city and accounted for less than 0.1 p.c. in Saskatoon.

More than one-third of the gainfully employed females in Kitchener and Sherbrooke were in manufacturing and between one-quarter and one-third in Brantford, Hull, Montreal, St. Catharines, Three Rivers and Verdun. Percentage in transportation was highest in Vancouver but at that only 3.6. In trade and finance the highest percentage was in Saint John, 16.9, followed by Vancouver, Windsor, Halifax and Sudbury. Percentages in clerical occupations was highest at Ottawa, 46.7 p.c. and lowest in Three Rivers, 9.45 p.c.

The cities might be classified by the occupations in which their percentage excelled the group. Toronto for example excelled the average for males chiefly in (I) manufacturing, (II) trade and finance, (III) service, and (IV) clerical; and for females in: (I) manufacturing, (II) trade and finance, and (III) clerical occupations. Montreal exceeded the average for males chiefly in: (I) construction and (II) transportation, and for females in manufacturing; while Vancouver excelled in: (I) manufacturing, (II) construction and (III) transportation, (IV) trade and (V) personal service for males; and (I) transportation, (II) trade and (III) service for females.

While this information may be useful in locating cities where jobs in the selected groups should be found it does not necessarily follow that openings are more easily obtained in these cities at any one time. Most sons of well-adjusted fathers would be well-adjusted in similar work and possess the aptitudes required for such work. Hence except in expanding cities there is little likelihood of many replacements being required from outside the city.

Percentage of gainfully employed in selected occupational groups for the 27 cities with populations of 30,000 or over for males and females, 1931 and 1941 may be observed from Tables 24, 25, 26 and 27.

Table 24. Per cent of the Gainfully Occupied Males, Classified by Occupation Group for Cities of 30,000 population and over, 1931

Cities	All Occupations	Primary	Manu- facturing	Con- struction	Trans- portation	Trade and Finance	Service	Pro- fessional	Per- sonal	Cleri- cal	Labour- ers
Brantford	100.00	1.64	35.58	7.39	7.17	14.36	9.10	3.44	3.85	7.71	16.97
Calgary	100.00	5.79	15.07	9.78	10.51	17.64	14.71	4.37	7.49	11.38	15.04
Edmonton	100.00	8.13	13.48	8.34	11.48	16.34	16.43	5.66	7.68	10.63	15.10
Fort William	100.00	3.85	14.98	7.70	18.88	10.17	9.12	2.14	4.79	8.13	27.14
Halifax	100.00	1.38	11.61	9.40	17.63	15.50	18.84	4.81	7.36	9.91	15.62
Hamilton	100.00	1.30	30.27	8.98	8.18	13.19	10.37	3.98	4.61	7.57	20.04
Hull	100.00	2.18	18.78	8.74	7.98	10.36	12.12	2.75	7.20	5.74	34.06
Kingston	100.00	1.34	17.84	9.28	14.07	15.58	23.41	6.53	8.71	5.34	13.08
Kitchener	100.00	1.31	43.97	7.64	5.52	13.45	8.72	3.37	3.87	8.38	10.93
London	100.00	1.51	23.82	9.49	11.54	17.81	13.83	4.71	6.04	8.93	13.01
Montreal	100.00	0.80	19.13	11.43	10.96	14.94	13.80	4.48	7.09	9.81	19.07
Ottawa	100.00	1.60	15.39	8.67	10.29	15.26	19.37	8.50	6.04	17.30	12.02
Outremont	100.00	0.43	16.35	3.84	6.29	34.85	15.59	9.88	4.10	20.52	2.05
Quebec	100.00	0.73	18.56	10.54	12.72	16.68	15.10	5.77	5.98	11.21	14.39
Regina	100.00	3.25	13.41	10.08	9.78	18.34	15.70	5.24	6.60	14.18	15.17
St. Catharines	100.00	2.59	28.02	11.06	9.80	13.80	11.57	4.93	4.66	6.09	16.95
Saint John	100.00	1.44	12.54	8.13	13.93	17.32	12.12	3.60	5.79	9.98	24.38
Saskatoon	100.00	3.84	12.30	11.24	11.62	19.51	14.89	5.46	6.81	10.41	16.16
Sherbrooke	100.00	1.52	26.55	9.05	9.41	14.84	13.23	5.20	6.26	6.90	18.44
Sudbury	100.00	17.63	12.03	13.95	9.58	9.80	12.25	4.09	6.08	5.05	19.70
Toronto	100.00	1.12	23.20	8.95	9.15	18.35	15.17	5.70	7.23	11.77	12.20
Three Rivers	100.00	0.96	23.31	10.16	8.30	11.64	10.73	4.89	4.28	6.61	28.27
Vancouver	100.00	7.72	14.57	9.24	10.99	16.30	15.81	4.44	9.24	7.67	17.65
Verdun	100.00	0.51	23.64	12.54	11.90	12.34	10.78	3.02	6.12	15.83	12.41
Victoria	100.00	6.23	13.71	7.93	11.72	14.86	20.64	4.65	12.01	8.05	16.83
Windsor	100.00	1.16	28.16	10.79	10.43	14.84	11.90	3.60	6.04	9.07	13.57
Winnipeg	100.00	3.35	16.75	9.24	10.86	16.97	14.25	4.59	7.19	11.92	16.54
Total	2,700.00	83.31	543.03	253.58	290.69	425.04	579.55	129.80	173.12	266.09	456.79
Average	100.00	3.09	20.11	9.39	10.77	15.74	14.06	4.44	6.41	9.86	16.92

GAINFULLY OCCUPIED MALES DISTRIBUTED IN PERCENTAGES BY OCCUPATION GROUP, FOR CITIES
 OF POPULATION 30,000 OR OVER, 1941 SERVICE

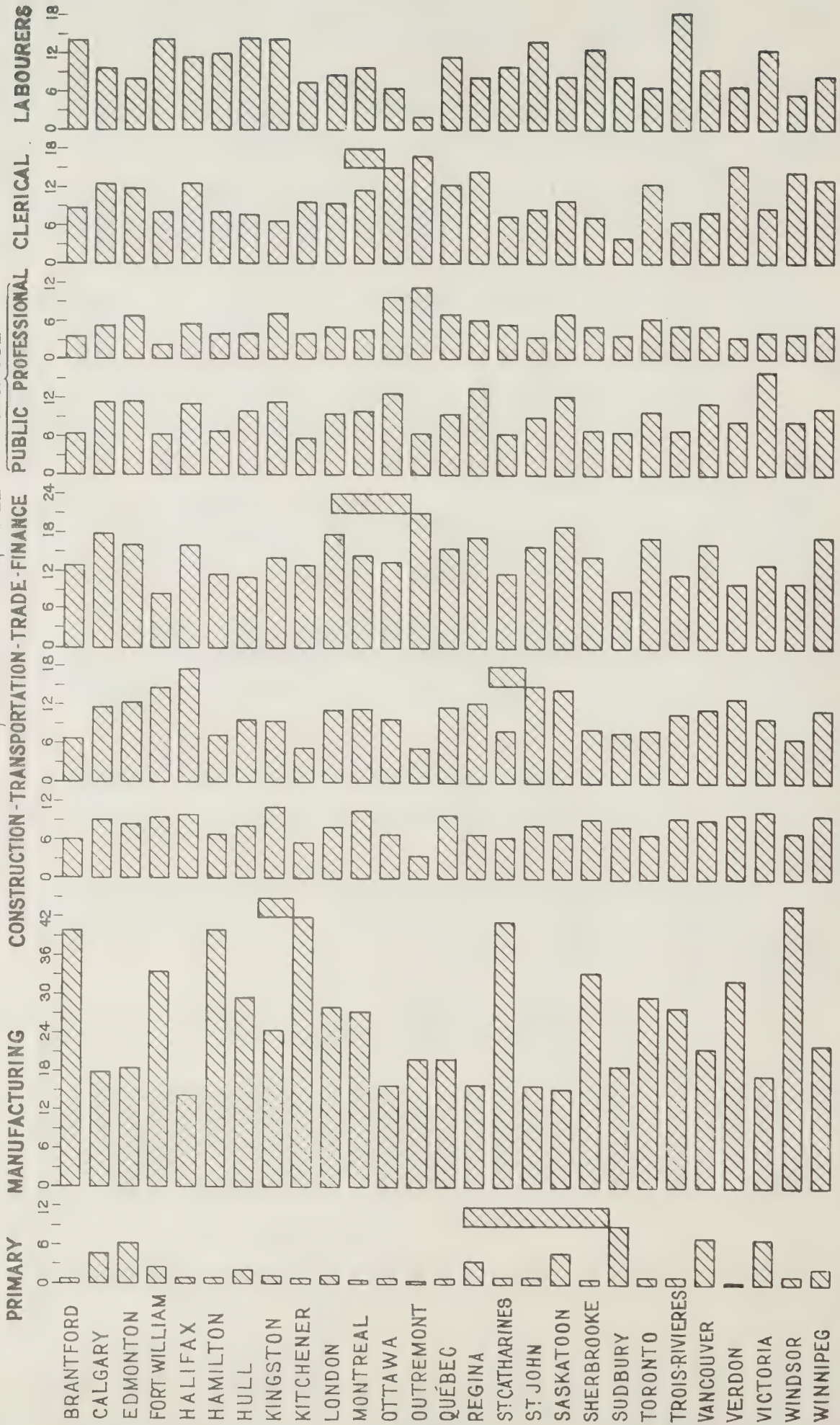


Table 25. Per cent of the Gainfully Occupied Males, Classified by Occupation Group for Cities of 30,000 population and over, 1941

Cities	All Occupations	Primary	Manu- facturing	Con- struction	Trans- portation	Trade and Finance	Service	Pro- fessional	Per- sonal	Cleri- cal	Labour- ers
Brantford ...	100.00	1.09	40.91	6.03	6.43	12.42	10.04	5.63	4.72	8.82	13.81
Calgary	100.00	4.66	17.86	9.10	11.71	17.92	16.61	5.22	8.27	12.38	9.56
Edmonton	100.00	6.04	18.24	8.70	12.26	16.45	18.10	6.43	7.92	11.91	7.97
Fort William ..	100.00	2.56	33.40	9.46	14.89	8.49	8.99	2.65	4.55	7.72	14.22
Halifax	100.00	1.13	14.48	9.91	17.93	15.69	17.13	5.72	7.68	12.61	10.69
Hamilton	100.00	1.12	40.37	7.45	7.17	11.47	11.49	4.4	5.21	8.81	11.77
Hull	100.00	2.24	29.70	8.84	9.73	11.02	14.44	3.80	8.18	8.73	14.20
Kingston	100.00	1.22	24.49	10.89	9.72	14.08	18.37	7.21	9.08	7.05	13.83
Kitchener ...	100.00	0.85	47.78	5.97	5.37	13.17	9.48	5.67	4.09	9.53	7.47
London	100.00	1.33	28.27	8.45	11.09	17.87	14.85	5.53	7.05	9.41	8.40
Montreal	100.00	0.73	27.41	10.38	11.30	14.04	15.07	5.13	7.45	10.74	9.78
Ottawa	100.00	1.08	17.30	7.38	9.77	13.75	22.24	9.86	6.94	21.35	6.35
Outremont ...	100.00	0.34	20.73	3.47	4.84	33.50	17.60	11.43	4.23	16.95	2.19
Quebec	100.00	0.91	20.52	10.23	11.87	15.32	16.52	6.77	6.01	12.26	11.52
Regina	100.00	3.34	16.60	7.76	12.24	17.12	19.49	5.98	7.99	14.78	7.78
St. Catharines.	100.00	1.47	41.58	7.45	8.15	11.16	12.32	5.42	4.87	7.59	9.96
Saint John ..	100.00	1.47	16.49	8.62	21.51	15.51	12.74	3.74	5.84	8.87	14.33
Saskatoon	100.00	4.86	15.42	7.37	13.90	19.71	19.57	7.21	9.00	10.54	8.25
Sherbrooke ..	100.00	1.27	33.50	9.25	8.35	13.91	12.64	5.28	5.24	7.45	13.10
Sudbury	100.00	31.59	18.85	8.39	7.95	8.96	11.50	4.15	5.00	4.63	7.64
Toronto	100.00	1.00	29.31	7.72	8.74	16.80	16.45	6.40	7.81	12.80	6.78
Three Rivers ..	100.00	1.11	28.79	9.56	10.77	11.19	12.93	5.49	5.44	7.27	18.02
Vancouver	100.00	7.39	21.15	9.11	11.56	16.06	16.60	4.94	9.11	8.45	9.18
Verdun	100.00	0.36	32.07	10.16	12.43	10.35	12.13	3.55	6.39	15.53	6.78
Victoria	100.00	6.91	16.80	10.51	9.81	13.31	20.96	4.37	13.80	7.63	13.67
Windsor	100.00	0.85	43.07	7.61	7.54	10.61	12.68	4.07	6.30	11.29	5.89
Winnipeg	100.00	2.38	22.42	9.75	11.70	16.89	15.56	5.16	7.46	12.68	8.31
Total	2,700.00	89.28	717.51	229.52	288.73	396.77	406.50	147.25	185.61	287.78	271.45
Average	100.00	3.31	26.57	8.50	10.69	14.70	15.06	5.45	6.87	10.66	10.05

Chart 18

GAINFULLY OCCUPIED FEMALES DISTRIBUTED IN PERCENTAGES, BY OCCUPATION GROUP, FOR CITIES OF POPULATION 30,000 OR OVER, 1941

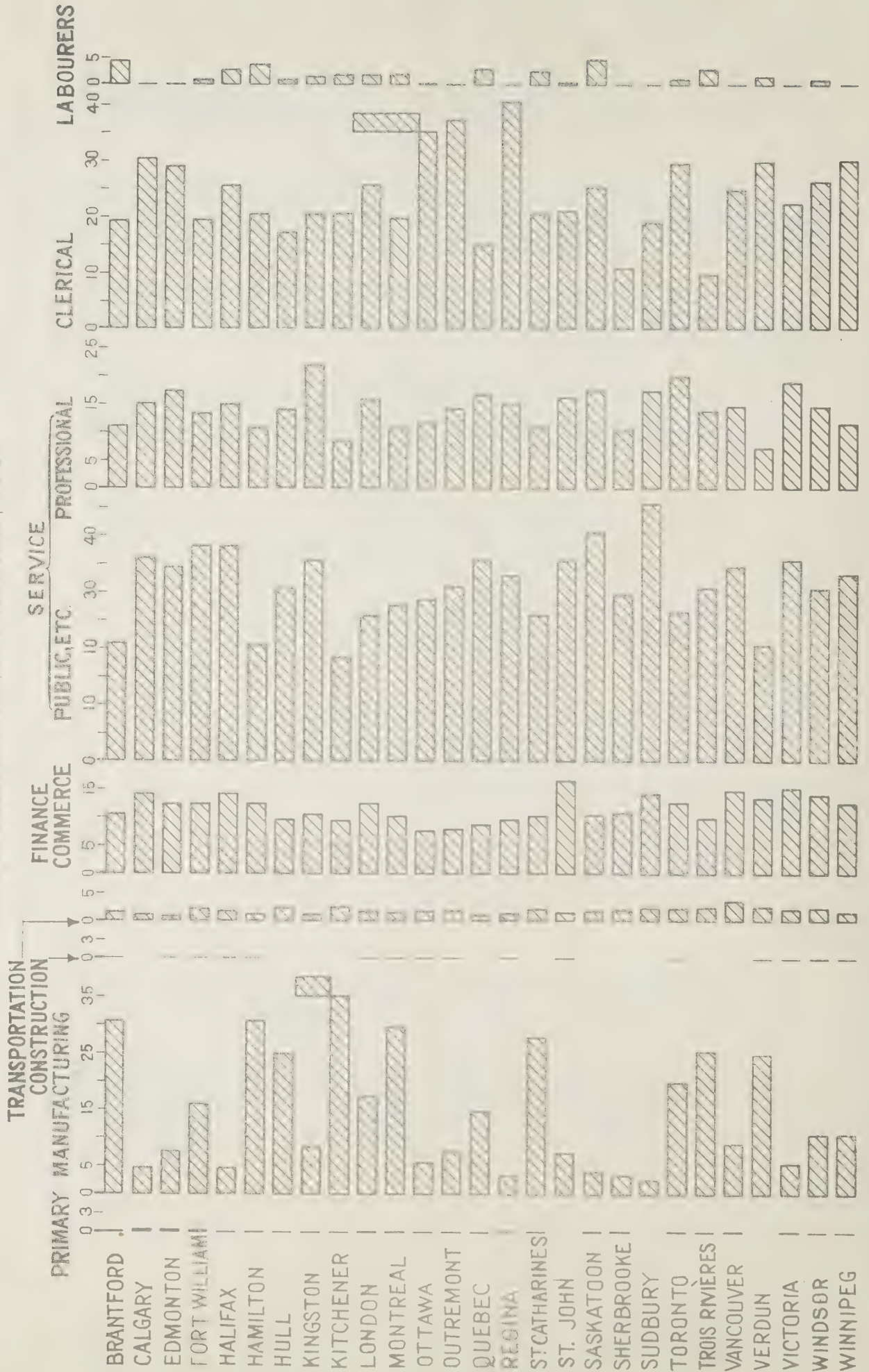


Table 26. Per cent of the Gainfully Occupied Females, Classified by Occupation Group for Cities of 30,000 population and over, 1931

Cities	All Occupations	Primary	Manu- facturing	Con- struction	Trans- portation	Trade and Finance	Service	Pro- fessional	Per- sonal	Cleri- cal	Labour- ers
Brantford	100.00	0.10	27.99	-	2.02	11.03	35.55	13.56	22.16	21.11	2.06
Calgary	100.00	0.12	4.60	-	1.90	11.60	50.25	16.01	34.10	31.13	0.39
Edmonton	100.00	0.11	6.04	-	1.29	10.60	54.64	19.43	35.06	26.87	0.46
Fort William	100.00	-	3.26	-	3.14	12.69	61.80	19.45	42.05	18.80	0.30
Halifax	100.00	0.05	5.74	-	2.55	12.85	54.27	15.22	38.88	24.05	0.45
Hamilton	100.00	0.08	24.69	0.01	2.64	12.44	36.83	12.24	24.55	20.31	2.93
Hull	100.00	-	17.85	-	1.09	10.34	51.73	16.67	35.01	13.85	5.14
Kingston	100.00	0.04	5.33	0.04	2.64	10.70	60.70	25.57	35.04	19.63	0.92
Kitchener	100.00	0.15	37.40	-	1.81	9.39	30.52	9.24	21.28	19.59	1.12
London	100.00	0.05	13.87	-	2.67	13.49	42.64	15.58	27.02	26.11	1.15
Montreal	100.00	0.03	23.42	-	2.56	10.04	40.92	11.48	29.31	19.22	3.75
Ottawa	100.00	0.03	6.02	-	3.32	7.91	46.24	15.19	30.67	35.89	0.56
Outremont	100.00	0.02	3.23	0.02	2.22	6.18	56.45	17.66	38.68	31.45	0.40
Quebec	100.00	0.06	17.00	-	1.52	9.20	55.10	17.13	37.89	13.19	3.87
Regina	100.00	-	3.09	-	1.41	9.59	49.46	15.67	33.63	36.18	0.27
St. Catharines	100.00	0.05	20.41	-	2.47	10.83	43.67	15.62	27.80	20.55	1.98
Saint John	100.00	0.04	9.18	-	2.62	15.85	47.90	14.05	33.62	23.45	0.84
Saskatoon	100.00	0.10	3.19	-	1.62	10.13	58.88	18.36	40.38	25.94	0.14
Sherbrooke	100.00	0.06	28.48	0.03	2.04	7.00	43.22	14.57	28.57	11.95	7.20
Sudbury	100.00	-	2.04	-	3.15	11.97	61.78	13.82	47.96	20.23	0.74
Toronto	100.00	0.02	16.91	-	2.86	11.29	39.78	11.38	28.24	28.11	0.94
Three Rivers	100.00	0.06	27.26	-	1.74	8.78	51.76	19.68	31.98	8.05	2.31
Vancouver	100.00	0.07	7.42	-	5.26	13.06	49.21	14.70	33.99	24.27	0.68
Verdun	100.00	-	18.09	-	4.85	14.25	29.90	6.08	23.78	31.02	1.90
Victoria	100.00	0.16	5.34	-	1.73	13.40	56.73	24.05	32.30	22.35	0.30
Windsor	100.00	0.02	7.19	-	3.64	12.37	44.82	15.78	28.79	30.69	1.21
Winnipeg	100.00	0.10	8.65	-	1.55	11.94	48.63	13.16	35.17	28.25	0.79
Total	2,700.00	1.52	353.69	0.10	66.31	298.92	1,303.38	421.15	878.13	632.24	42.80
Average	100.00	0.06	13.10	0.01	2.46	11.07	48.27	15.60	32.52	23.42	1.59

Table 27. Per Cent of the Gainfully Occupied Females, Classified by Occupation Group for Cities of 30,000 population and over, 1941

Cities	All Occupations	Primary	Manu- facturing	Con- struction	Trans- portation	Trade and Finance	Service	Pro- fessional	Per- sonal	Cleri- cal	Labour- ers
Brantford	100.00	-	31.26	0.08	1.90	10.49	32.30	10.96	21.09	19.27	4.14
Calgary	100.00	0.19	4.92	-	1.48	12.60	50.35	14.67	35.44	30.02	0.25
Edmonton	100.00	0.14	7.78	0.01	0.97	11.80	51.19	17.38	33.53	27.72	0.27
Fort William	100.00	0.11	16.23	0.07	2.33	11.36	49.79	13.03	36.54	18.36	1.60
Halifax	100.00	0.06	6.34	0.03	1.61	13.87	50.90	14.19	36.64	26.38	0.53
Hamilton	100.00	0.08	31.00	0.12	1.17	11.57	31.64	10.59	20.96	21.34	2.84
Hull	100.00	-	24.93	-	0.28	9.69	43.36	13.06	30.23	17.87	3.44
Kingston	100.00	-	8.11	-	2.52	10.50	57.04	21.96	35.01	20.14	1.44
Kitchener	100.00	0.02	41.67	-	1.04	8.93	26.02	7.69	18.22	20.57	1.49
London	100.00	0.02	15.03	0.10	2.76	12.62	41.52	15.24	26.18	26.29	1.56
Montreal	100.00	0.02	29.63	0.03	1.54	10.01	37.09	10.03	26.90	19.90	1.56
Ottawa	100.00	0.03	5.16	0.03	1.39	6.80	39.20	10.98	28.06	46.69	0.34
Outremont	100.00	0.04	6.77	-	1.83	7.51	46.02	14.16	31.75	37.35	0.34
Quebec	100.00	0.10	19.72	-	1.04	8.67	52.30	16.52	35.71	14.68	2.92
Regina	100.00	0.04	2.97	0.01	1.27	9.61	45.47	13.38	31.95	40.15	0.24
St. Catharines	100.00	0.16	26.53	-	2.11	10.09	36.78	10.65	26.10	21.89	2.24
Saint John	100.00	-	7.24	0.02	1.26	16.89	50.82	15.68	34.84	22.40	1.01
Saskatoon	100.00	0.18	3.95	-	1.43	10.62	58.50	17.77	40.35	25.03	0.07
Sherbrooke	100.00	0.08	34.42	-	1.65	7.64	40.11	11.04	28.97	11.18	4.63
Sudbury	100.00	-	2.95	-	1.70	13.47	64.20	17.48	46.72	17.38	0.15
Toronto	100.00	0.03	19.72	0.12	1.61	11.95	35.55	10.89	24.43	29.50	1.28
Three Rivers	100.00	0.02	25.06	-	1.72	9.03	51.45	19.71	31.69	9.45	3.09
Vancouver	100.00	0.08	7.83	-	3.55	14.92	48.72	14.39	33.83	24.22	0.52
Verdun	100.00	-	24.85	0.05	2.41	13.07	27.88	7.66	20.06	29.92	1.74
Victoria	100.00	0.11	5.77	0.04	1.29	15.33	55.69	20.06	35.21	21.43	0.18
Windsor	100.00	0.03	11.66	0.24	1.53	14.04	43.96	13.88	29.81	26.74	1.48
Winnipeg	100.00	0.04	11.55	0.02	1.33	12.22	44.90	11.78	32.75	29.06	0.77
Total	2,700.00	1.58	403.07	0.97	44.77	305.30	1,212.75	374.83	832.97	654.93	40.16
Average	100.00	0.01	14.93	0.04	1.66	11.31	44.92	13.88	30.85	24.26	1.49

8. A SOCIAL-ECONOMIC GROUPING OF THE GAINFULLY OCCUPIED IN CANADA, 1941

The social-economic grouping which follows should be considered as additional to those already referred to, the usual census tables of different industrial and occupational groups and general divisions or classes of occupations. In defence of this new grouping it might be pointed out that to a great extent it follows lines of demarcation used in sociological and industrial studies, as well as those basic to the conversation of the man in the street. Hence it should provide an objective basis and numerical ratios for concepts already in use.

Skill enters into the picture although it is but one of several factors. Nor is it in many cases separate from mental ingenuity. Individuals are seldom head or hand workers but need to exercise various degrees of thought, manual dexterity and muscular force.

The grouping to follow is somewhat arbitrary. Workers in the field differ as to the number of divisions which should be used and the composition of those divisions. Six divisions have been selected, so constituted that the main groups may be compared with a similar classification of workers based on the United States census of 1930.^x Three of the main groups are subdivided giving a scale of twelve divisions which may be used for comparative purposes or to indicate trends.

The first two classes, "professional persons" and "owners and managers" probably require no comment. The "professional group" is similar to the professional group ordinarily found in census categories. The second group is made up of proprietors, managers and officials. It is subdivided into "farm proprietors", "wholesale and retail dealers" and "all other proprietors, managers and officials".

The third group of "clerks and commercial workers" covers a greater range of ability and talent. It includes office staffs who assist executives and professional men, salespeople in stores and on the road, telegraph and telephone operators, and other kindred workers.

The last three divisions are to a great extent based on skill. The fourth or skilled group includes those whose work necessitates the serving of an apprenticeship or a comparatively long period of training, and which calls for a fairly high degree of judgment, manual dexterity or both. This class includes foremen and craftsmen in the skilled trades such as carpenter, machinist, tailor, locomotive engineer, etc.

The fifth group is made up of occupations considered as semi-skilled. These are more easily mastered than the skilled and require but a moderate use of judgment and manual dexterity. Apprentices, machine tenders, deliverymen, etc. are included in this group.

The last group is composed mainly of unskilled workers who are paid to contribute muscular energy often in coarse heavy work. Little training is necessary for such occupations and the members are seldom required to display much judgment or muscular dexterity. Farm labourers, factory, construction and other labourers and servants are included. There is no suggestion that individuals in these groups do not possess good judgment or manual dexterity, merely that their jobs do not call

^x A Social-Economic Grouping of the Gainful Workers of the United States, Superintendent of Documents, Washington, D.C., 1938.

for these qualities and persons possessing such would be better adjusted in occupations in one or other of the remaining groups.

The initial classification of jobs in the census is planned by those in the demography division who set up the job specifications. The interpretation and placement of each gainfully occupied is the task of enumerators, and the census staff who check the work of these enumerators. The difficulty of reducing several thousand combinations of work-patterns to the several hundred classifications used in the census should not be underestimated. Considering possibilities for error and the number of mixed occupations it is obvious that errors will creep in. Grouping of these categories into larger divisions will probably add new sources of error irrespective of the basis on which the regrouping is made. Attempts at grouping workers into social-economic classes is no exception. Despite its imperfections, however, the result is valuable in indicating trends and for that reason merits inclusion herein.

Limitations

There are weaknesses to this division which can hardly be overlooked. Members of the selected groups vary widely among the professional group. Wages vary, for example from \$702 for nurses (\$174 for nurses in training) to \$5,369 for judges and magistrates and the amount of training required varies almost as greatly. Similarly it is necessary to classify the peanut vendor who operates his small business in the same category as the owner or manager of the largest wholesale and retail establishments, banks, etc.

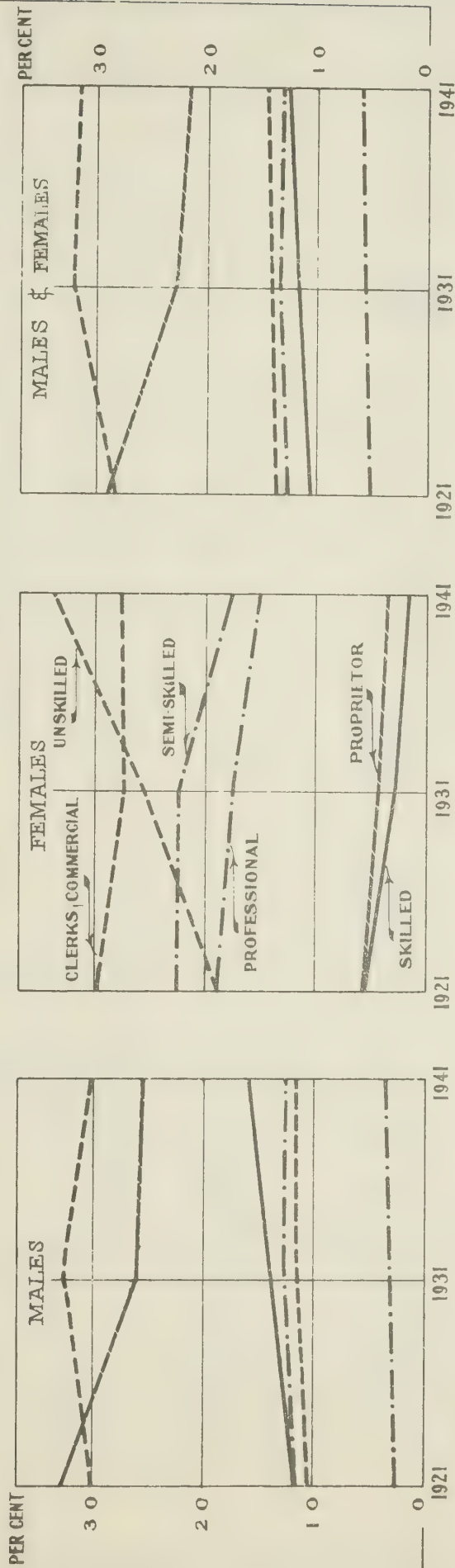
Again it was impossible to classify all manual workers satisfactorily as skilled, semi-skilled or unskilled. Undoubtedly some in each group are misplaced and certain of the lesser occupations might have been more suitably placed in other categories. However, it is doubtful if such adjustments would materially affect the totals in percentages. Where a fair degree of specialization is found classification was usually possible, but Canada still possesses many small establishments where the owner is proprietor, technician, clerk and janitor. Perhaps these should be in a category by themselves.

Another classification difficulty arises from a gradual change in the work requirements of certain occupations. In the case of farm labourers, for example, there was a time when all that was required was the ability to harness, feed and drive horses on comparatively simple farm machinery, milk cows and provide manpower for a number of comparatively simple operations. Now, farm hired men may be expected to be fair mechanics who can operate and repair such machines as a tractor or combine, and who would easily qualify as semi-skilled workers. It is doubtful, however, if their social-economic status changed accordingly. Keeping such limitations in mind the following would seem to be amply justified.

Trend in Social-Economic Groups, 1921-1941

Table 28 gives the number and percentage for each of the six main groups and the 12 sub-groups for males, females and all gainfully employed workers in Canada in 1921, 1931 and 1941. Omitted are a few hundred workers who could not be classified in compiling the census data. In no case would these affect the percentages given or change the trend.

TRENDS IN NUMBERS FORMING SOCIAL-ECONOMIC GROUPS, 1921, 1931, 1941



PERCENTAGE DISTRIBUTION OF SOCIAL-ECONOMIC GROUPS BY YEARS AT SCHOOL

1941

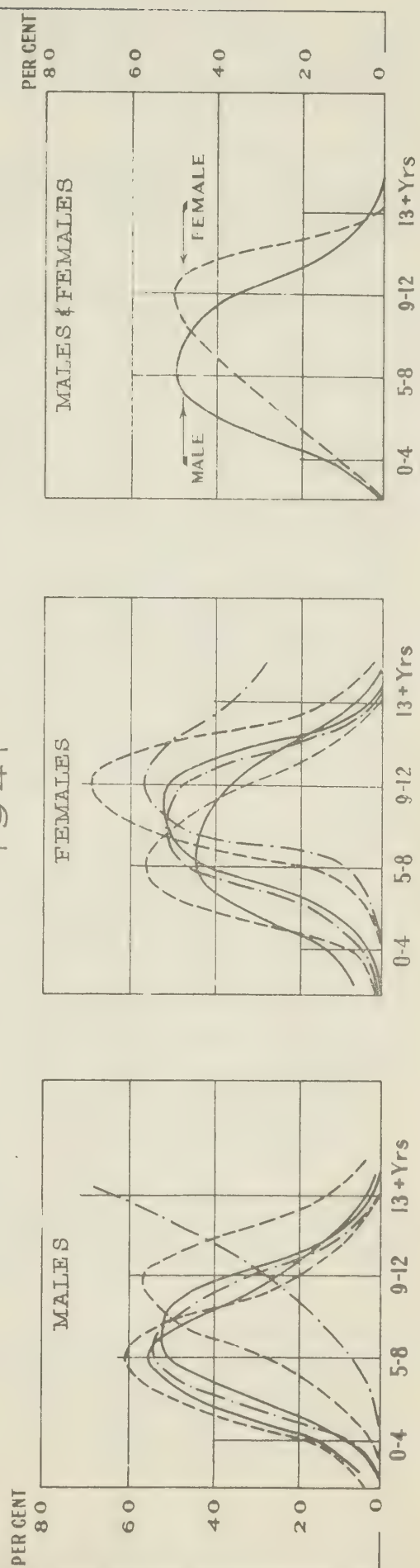


Table 28. Gainfully Employed Workers in Canada, Classified in Social-Economic Groups by Sex, 1921, 1931, 1941.

	1921	1931	1941	1921	1931	1941
	No.	No.	No.	p.c.	p.c.	p.c.
MALE						
1. Professional persons	78,863	104,601	123,033	2.9	3.2	3.7
2. Proprietors, managers and officials	892,972	850,487	864,664	33.2	25.8	25.7
(a) Farmers (Owners, tenants)	639,525	625,112	638,857	23.8	19.0	19.0
(b) Wholesale and retail dealers and service	118,256	130,934	146,143	4.4	4.0	2.3
(c) Other proprietors and officials	135,191	93,441	79,664	5.0	2.8	2.3
3. Clerical, commercial and related occupations.....	286,091	372,951	389,981	10.7	11.4	11.6
(a) Clerical	127,325	141,465	182,745	4.7	4.3	5.4
(b) Commercial	134,653	173,323	164,453	5.1	5.3	4.1
(c) Other	24,113	58,163	32,783	0.9	1.8	1.1
4. Skilled workers and foremen	312,652	452,978	519,190	11.6	13.9	15.8
(a) Manufacturing and construction.	246,002	353,467	414,960	9.2	10.8	12.5
(b) Other	45,068	61,135	67,011	1.6	1.9	2.0
(c) Foremen and overseers	21,582	38,376	37,219	0.8	1.2	1.2
5. Semi-skilled workers	303,913	393,084	409,969	11.5	12.4	12.3
6. Unskilled and service workers	807,479	1,086,274	1,038,919	30.1	33.3	30.9
(a) Farm labourers	381,136	478,632	431,102	14.2	14.7	12.8
(b) Other	402,600	564,410	533,067	15.0	17.3	15.9
(c) Service workers	23,743	43,232	74,750	0.9	1.3	2.2
FEMALE						
1. Professional persons	92,946	117,442	126,802	19.0	17.6	15.2
2. Proprietors, managers and officials	26,516	29,880	30,685	5.4	4.5	3.7
(a) Farmers (Owners, tenants)	16,319	19,196	14,063	3.3	2.9	1.7
(b) Wholesale and retail dealers and service	7,830	8,969	13,392	1.6	1.3	1.6
(c) Other proprietors and officials	2,367	1,715	3,230	0.5	0.3	0.4
3. Clerical, commercial and related occupations	146,259	181,265	232,824	29.8	27.3	27.9
(a) Clerical	90,612	117,502	155,208	18.5	17.6	18.7
(b) Commercial	41,318	47,503	59,168	8.4	7.2	7.1
(c) Other	14,329	16,260	18,448	2.9	2.5	2.1
4. Skilled workers and foremen	25,947	18,258	12,405	5.3	2.7	1.5
(a) Manufacturing and construction.	24,177	15,147	9,040	4.9	2.3	1.2
(b) Other	245	83	582	0.1	0.0	0.0
(c) Foremen and overseers	1,525	3,028	2,783	0.3	0.4	0.3
5. Semi-skilled workers	104,848	149,860	146,331	22.4	22.5	17.6
6. Unskilled and service workers ...	93,634	169,150	282,896	19.1	25.4	34.1
(a) Farm labourers	1,539	4,854	4,871	0.3	0.7	0.6
(b) Other	494	12,204	12,010	0.1	1.8	1.6
(c) Service workers	91,601	152,092	266,015	18.7	22.9	31.9

Table 28. Gainfully Employed Workers in Canada, Classified in Social-Economic Groups by Sex, 1921, 1931, 1941. - Concluded.

	1921	1931	1941	1921	1931	1941
	No.	No.	No.	p.c.	p.c.	p.c.
MALE and FEMALE						
1. Professional persons	171,809	222,043	249,835	5.4	5.7	6.0
2. Proprietors, managers and officials	919,488	880,367	895,349	29.0	22.4	21.4
(a) Farmers (Owners, tenants) ...	655,844	645,308	652,920	20.7	16.4	15.6
(b) Wholesale and retail dealers, service	126,086	139,903	159,535	4.0	3.6	3.8
(c) Other proprietors and officials	137,558	95,156	82,894	4.3	2.4	2.0
3. Clerical, commercial and related occupations						
(a) Clerical	217,937	258,967	337,953	6.9	6.6	8.2
(b) Commercial	175,971	220,826	223,621	5.5	5.6	5.4
(c) Other	38,442	74,423	61,231	1.2	1.9	1.3
4. Skilled workers and foremen	338,599	471,236	531,595	10.7	12.0	12.9
(a) Manufacturing and construction.	270,179	368,614	424,000	8.5	9.4	10.1
(b) Other	45,313	61,218	67,593	1.4	1.6	1.6
(c) Foremen and overseers	23,107	41,404	40,002	0.8	1.0	1.2
5. Semi-skilled workers	408,761	542,949	556,300	12.9	13.8	13.3
6. Unskilled and service workers ...	901,113	1,255,424	1,321,815	28.5	32.0	31.5
(a) Farm labourers	382,675	483,486	435,973	12.1	12.3	10.4
(b) Other	403,094	576,614	545,077	12.7	14.7	13.0
(c) Service workers	115,344	195,324	340,765	3.7	5.0	8.1

Chart 19 plots the percentages for the six main groups for the three census years so that any changes may be more easily observable. Had this chart gone back to 1900 undoubtedly there would have been greater variation noticeable as industry advanced and specialization developed. From 1921 to 1941, while there was expansion and development most of the changes were not radical. Fluctuations, month by month, year by year, would not be caught by the census. The most prominent changes reflected a percentage decrease in the number of "proprietors" and a percentage increase in the number of unskilled workers from 1921 to 1931. (Part of this difference may be due to classification changes in tabulating the census considering placing of "own account" group)

The professional group showed a small but steady increase for the period although this was not true of the female division. Their number increased but not in proportion to the number entering gainful employment.

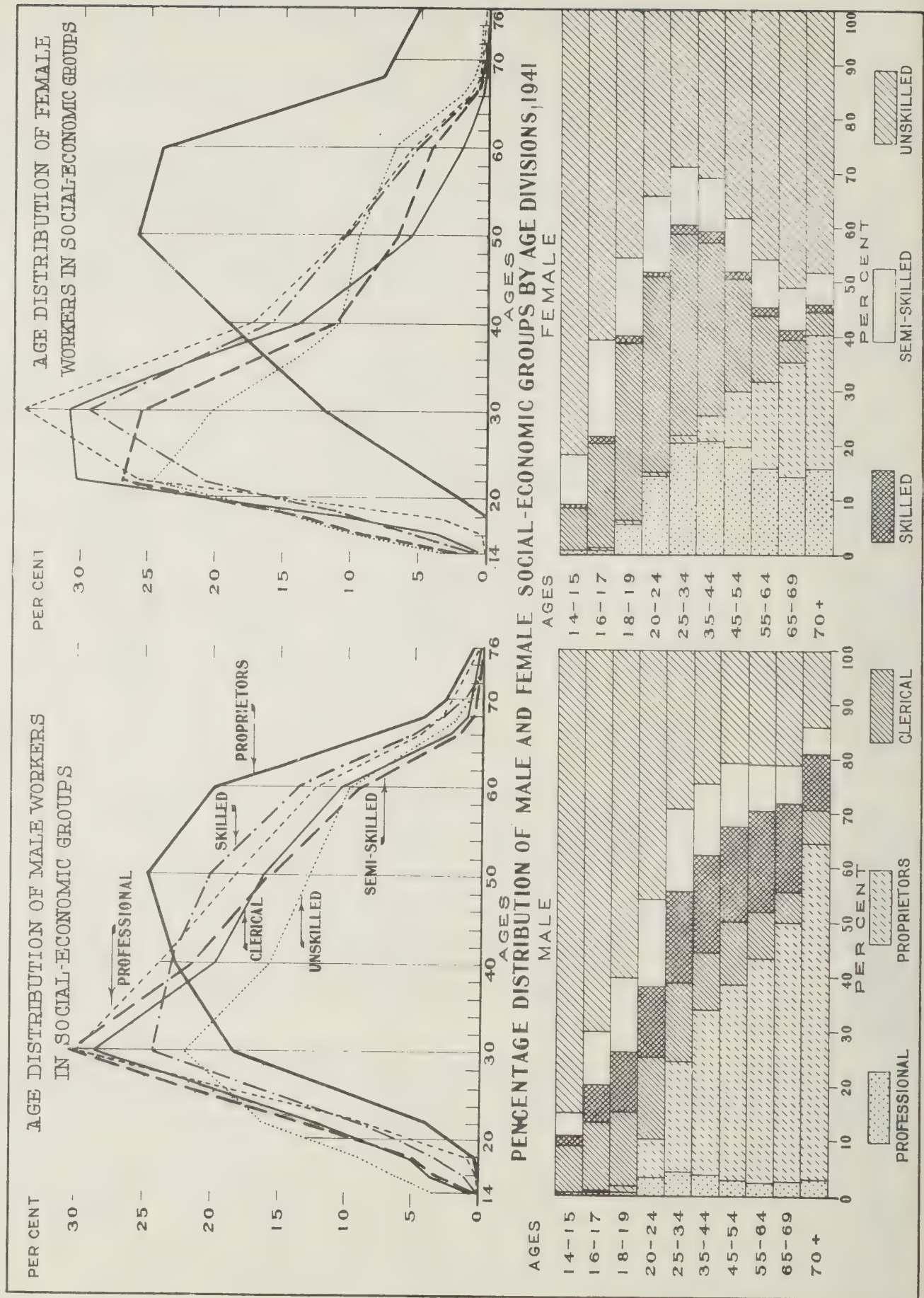
Proprietors, managers and officials dropped considerably in both number and per cent of males from 1921 to 1931 and although the number increased during the next ten years by 1941 the percentage had dropped slightly. The number of female "proprietors" increased by about 40 and 50 thousand, respectively, during the two decades, but the proportion dropped 2.5 p.c. during the first decade and gained only 0.8 p.c. during the second.

The clerical-commercial group showed a small percentage increase for the period. The number of males, in commercial occupations increased rapidly during the

GAINFULLY OCCUPIED DISTRIBUTED IN SOCIAL-ECONOMIC AND

AGE DIVISIONS, BY SEX, 1941

Charts 21-22



first decade, but dropped during the second, while the clerical group increased during both decades, but more rapidly in the second. The actual number of females employed in clerical and commercial occupations increased considerably but its percentage of the total dropped.

The proportion of workers employed in the skilled trades increased during the period. This was, however, due to an increase in the number of males as the number of skilled females diminished, reflecting a drop in numbers engaged in such occupations as milliners, bookbinders, etc., which more than made up for gains in other trades which showed an increase. Numbers employed as foremen and supervisors increased during the first decade but decreased during the second.

The proportion in the semi-skilled groups changed very little during the period. Gains in the number occupied in manufacturing were offset by losses in the number employed in other occupations, e.g., the number of women employed as dressmakers and sewers, men as spinners and twisters, etc.

The unskilled and service workers formed the largest grouping in 1941 both for males and females. The percentage of males increased during the first decade but fell off during the second. Since then the shortage of farm labourers, woodmen and miners has been more apparent. The number of females increased more than threefold during the twenty years and the proportional increase was 78.5 p.c. Many workers entered the ranks of casual "labour" in 1931 who would have been otherwise classified in good times --others were classed among the unemployed.

Omitting those on active service in 1941 the census figures showed increases in the professional, clerical-commercial, skilled males and unskilled females. The picture has changed since 1941 but whether the changed status will remain or revert to become somewhat comparable with the 1941 pattern will not be known for some years. Those on active service must find a place in industry and the occupational position of women will have to be classified. The 1951 Census should reflect this adjustment as well as growth during the intervening years.

Age Distribution of Gainfully Employed Workers in Each Social-Economic Group, 1941

Certain occupations are considered to be most suitable for older people while others appear to attract the younger worker. Again it is often considered that there is ample opportunity for anyone to improve his position, not only in each group but from one group to another. It is not unusual for parents belonging to the unskilled group to urge their sons and daughters to aim for the professional group or at least the clerical-commercial or "white-collared" occupations. There is some evidence in the census data which indicates that there is some considerable movement from group to group. The younger workers are to be found mainly in the unskilled-servant class while the number of proprietors increases proportionately with age.

Median Age of Workers in the Social-Economic Groups

The median age is the age which divides the workers into two equal groups, one-half being older, and one-half younger than the median. Table 29 shows the median age for the six groups, male and female.

The median ages vary rather widely from group to group. It was not surprising that the median age of the proprietor group was higher than that of any other group. That the median age for the females was higher than for the

males is in part due to the number of widows taking over enterprises from deceased husbands.

Table 29. Median Age of the Gainfully Occupied Workers in Canada by Social-Economic Group and Sex, 1941

	Male	Female
1. Professional	39.3	32.1
2. Proprietors, managers, officials	47.2	49.6
3. Clerical and commercial	34.9	26.2
4. Skilled workers, foremen	40.6	26.5
5. Semi-skilled workers	34.3	25.2
6. Unskilled and service workers	31.1	25.9

The median age for the male professional group was higher than that for the females due to difference in composition of the group. The large percentage of nurses and school teachers among the females tended to keep the average age down as the majority of them entered young and remained for only a few years. Most of the men, on the other hand, either stayed in the professions if they were teachers, etc. or were members of such professions as required more years of preparation. This tendency for women's age groups to be younger is noticed in the other groups as well. Large numbers of young women have engaged in gainful occupations between the time they have finished at school and entered marriage. This has kept the median age for the clerical-commercial, skilled, semi-skilled and unskilled at about the same level as opportunity for marriage is not appreciably higher in one group than another.

The male clerical-commercial and semi-skilled groups have about equal median ages. Median age for the unskilled-servant group, where the requirements are lower and there are many youths, is appreciably lower while that for the skilled worker-foremen group is higher.

Age Distribution of the Social-Economic Groups

Figure 20 gives the age distribution of male and female workers in each social-economic group. These show clearly the greater concentration of women in the ages below forty except for the proprietor group. (Census age groupings were used in preparing this chart. They allow for the plotting of ten points only which results in a tendency to show concentrations on a single year which should properly have been distributed over an area up to five years on either side of the high point plotted.)

Chart 21 presents the same data in another way. Here the percentage composition of the gainful workers, male and female, are given for each of the age groups adopted by the census.

The distribution for males differs considerably from that for the females. The male professionals increased in proportion to the rest of the workers until about age 35 when the majority who were going to enter had entered. The majority remained in their profession until quite late in life; the proportion remaining fairly constant from age 45 on.

Unlike the professional group where entrance depends largely on academic preparation the proprietor class increased in proportion to the rest of the workers

in the higher age brackets. Almost 61 p.c. of the gainfully employed above the age of 70 belong to the proprietor class. Entrance into this group depends largely on savings, experience and initiative. Also the work performed by an aged proprietor may consist largely in puttering around, which would be difficult for anyone except an owner or proprietor.

Many in the clerical-commercial group entered at an early age. More left than entered from age 35 on.

There were few skilled workers under sixteen, a greater number of semi-skilled and almost 85 p.c. unskilled. The unskilled increased proportionately among the groups until age 55 and held up rather well until the age of retiring. The semi-skilled reached their greatest concentration before age 35 and decreased in comparison to the total from then on. The unskilled decreased relatively until ages 45-50 and then increased slightly.

Certain outstanding differences from the male grouping are noticed for the female distributions. The professional and clerical-commercial groups are proportionately larger for the females. The unskilled and service workers decreased to age 35 and then increased to age 70. The proprietors increased proportionately in the higher age bracket but never reached the extent shown for the males.

Number of Years at School of the Gainfully Occupied Workers by Social-Economic Groups Showing Number of Years at School by Sex.

Table 30 and Chart 22 give a percentage distribution for the six groups showing the number of years at school by sex.

The chart showing the number of years of attendance at school for all gainfully occupied males and females indicated that on the average the female working population has attended school considerably longer than the male. The same was found for each of the social-economic groups except the professional. In it almost 65 p.c. of the males had 13 years or more at school. All of the other groups showed less than 15 p.c. with the exception of the female professional in which 36.6 p.c. had 13 or more years at school.

The clerical-commercial groups, male and female, had the second highest number of years at school. On the average the labour-servant group came last with the semi-skilled and skilled showing somewhat more schooling. The proprietor groups fell between the unskilled and semi-skilled.

Table 30. Number of Years at School for Gainfully Occupied Workers Distributed in Percentages by Social-Economic Groups and Sex, 1941

			0-4	5-8	9-12	13 +
1. Professional	Male		0.3	7.6	27.2	64.9
	Female		0.3	7.2	55.9	36.6
2. Proprietors, etc.	Male		15.4	55.3	24.8	4.5
	Female		12.8	44.1	37.2	5.9
3. Clerks, etc.	Male		2.1	28.1	57.1	12.7
	Female		0.4	15.4	70.0	14.2
4. Skilled, etc.	Male		8.8	52.0	35.6	3.7
	Female		3.3	41.8	50.7	4.2
5. Semi-skilled	Male		8.2	54.9	34.1	2.8
	Female		3.6	45.7	47.7	3.0
6. Unskilled	Male		17.0	61.1	20.5	1.4
	Female		8.0	55.3	34.3	2.4

Table 31. Annual Earnings and Number of Weeks Employed for the Social-Economic Groups by Sex, 1941

			Earnings	Weeks Employed
			\$	
1. Professional	Male		1,800	48.0
	Female		850	48.0
2. Managerial	Male		2,200	51.0
	Female		1,100	49.0
3. Clerks, kindred workers	Male		1,275	47.0
	Female		770	44.5
4. Skilled	Male		1,100	42.5
	Female		560	40.0
5. Semiskilled	Male		900	43.0
	Female		525	39.5
6. Unskilled	Male		665	34.25
	Female		266	37.4

Earnings of the Wage-earning Members of
The Social-Economic Groups, 1941

Earnings included herein represent those of wage-earners only as the census enumerators do not collect earnings for enterprisers.

In the first or professional group there are a limited number representing such professions as medicine, dentistry, law, etc. (Those omitted are in reality small proprietors who charge fees for service.) While salaries tabulated by the census enumerators are indicative of salaires paid, in some cases they are not representative of those recieved on the average by the group. Care must be taken in any interpretation to consider size and representativeness of the sample included. Whereas for law and medicine the representation is by no means high practically all teachers are included and a fair percentage from such groups as nurses.

In the second group only managers and officials on salary or commission are considered. These are none too representative of the whole group in some occupational divisions. The majority of skilled workers are wage-earners as are clerks, semi-skilled and unskilled workers.

Men and women on active service were not included in the following compilations even though some two-thirds of them had been gainfully employed prior to enlistment.

Some of those enumerated actually earned more than is shown. This would happen where a man is on salary but also does part-time work but fails to report such earnings. Again it may happen where a man lives on a small holding outside the city but neglects to include income from cow, hens, etc. Another possibility exists where a man changes jobs during the year but reports earnings for only one. It must be kept in mind that in 1941 our industry was expanding and newcomers at a fair rate of income who had worked for but a few months would report a small total income for that year.

No allowance is made for board and lodging even though these may form a considerable part of the remuneration received. This particularly affects the

Chart 23

PERCENTAGE DISTRIBUTION OF MALE WAGE-EARNERS BY ANNUAL INCOME FOR SOCIAL ECONOMIC GROUPS WITH SELECTED OCCUPATIONS PLOTTED AT AVERAGE EARNING POINT, 1941

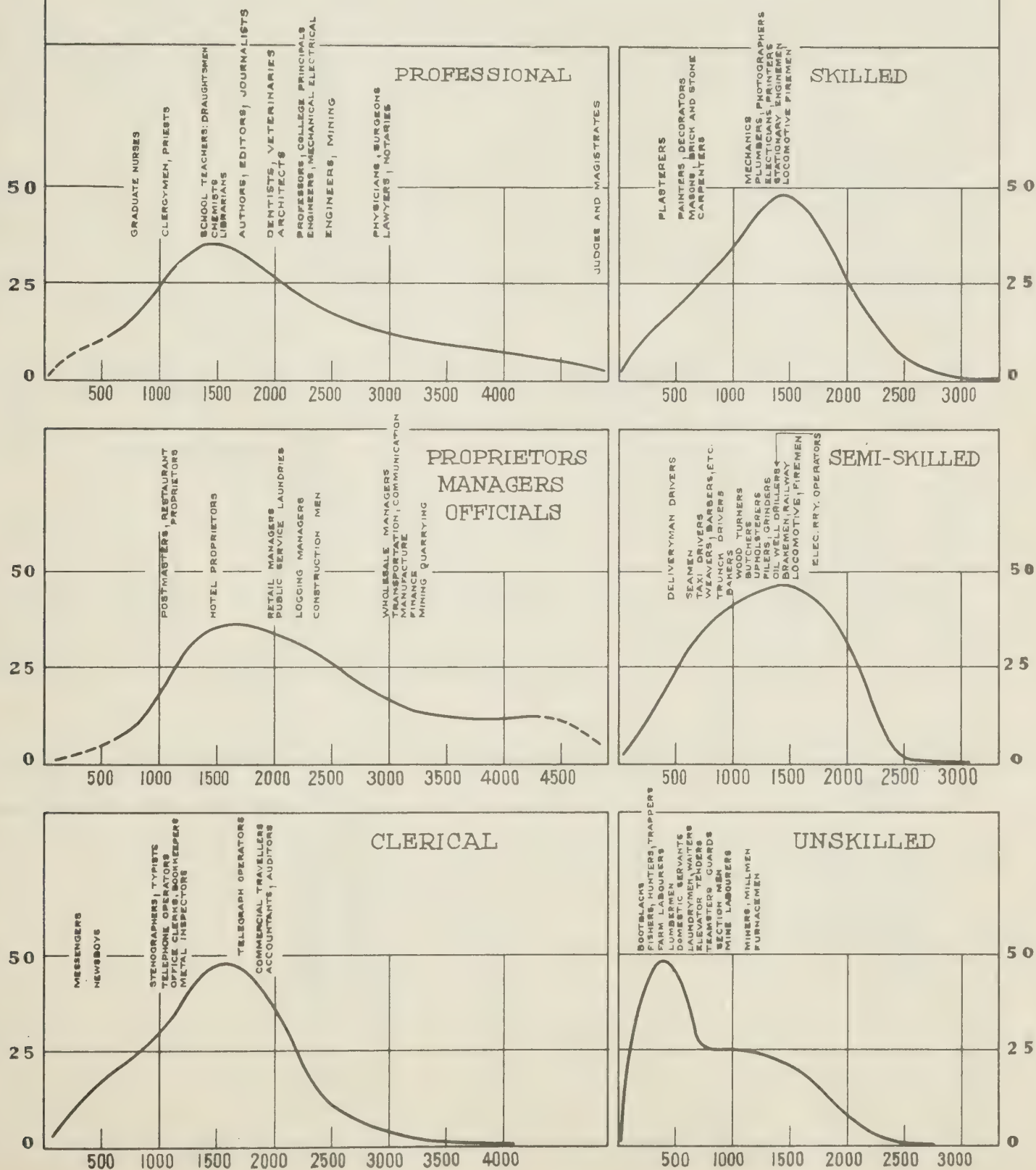
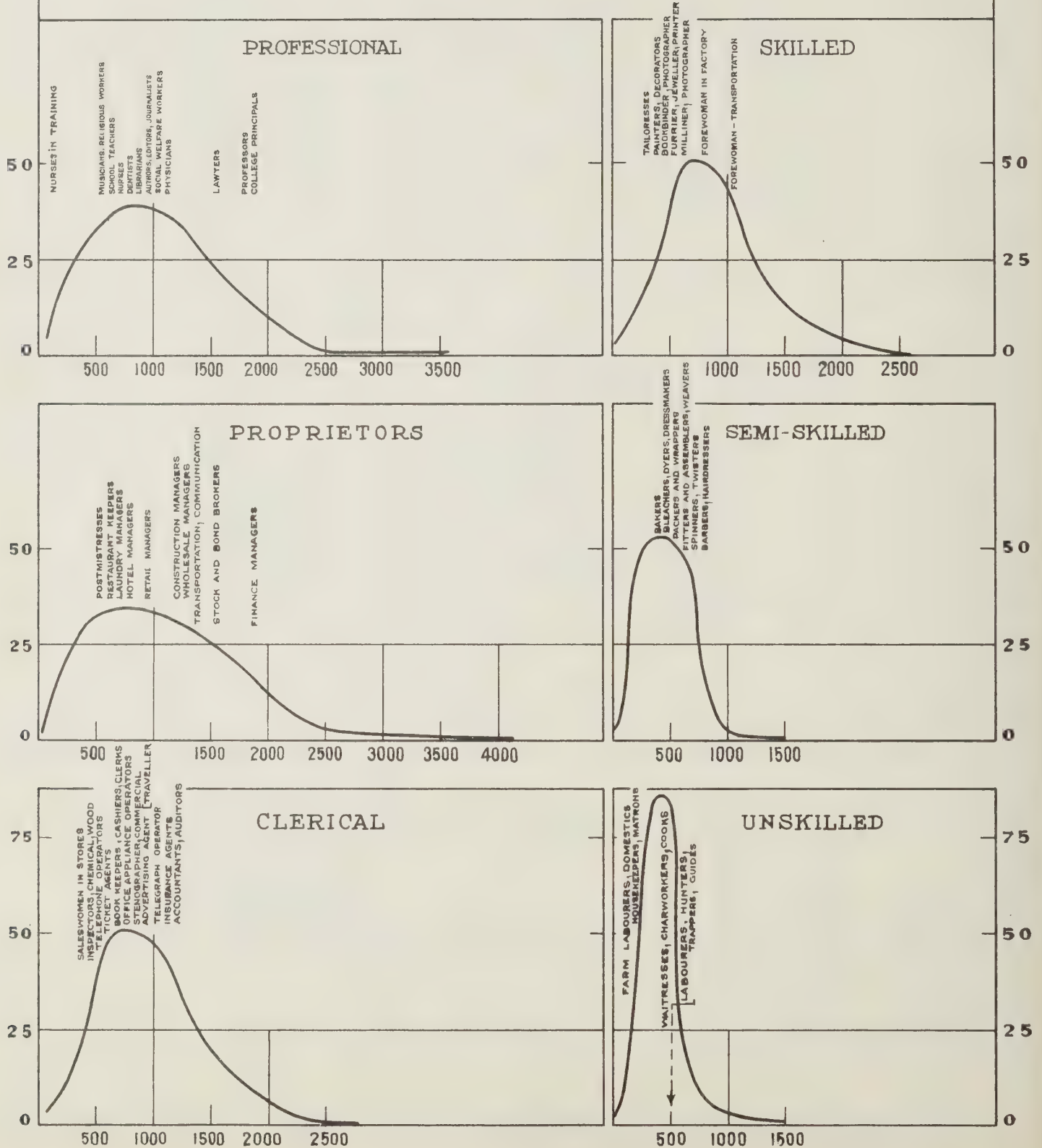


Chart 24

PERCENTAGE DISTRIBUTION OF FEMALE WAGE-EARNERS BY ANNUAL INCOME FOR SOCIAL-ECONOMIC GROUPS WITH SELECTED OCCUPATIONS PLOTTED AT AVERAGE EARNING POINT, 1941



unskilled-servant class where farm-labourers and servant girls, for example, receive wages plus board. It is also a factor in nursing, etc.

Such considerations should be kept in mind when the following figures are examined.

Median Annual Earnings and Number of Weeks Employed
for the Social-Economic Groups by Sex, 1941

From weeks employed and annual earnings some idea of steadiness of employment may be obtained. Weeks employed may be reduced by lay-off, loss of job, illness, etc. and while 1941 was not a too representative year, it should be adequate for a comparison of the groups. Earnings divided by weeks employed will yield comparable weekly wages for the various groups.

Table 31 gives the earnings and weeks employed. In all cases the male groups received higher wages than the comparable female groups. The managerial group received more than the professional, otherwise the average wages dropped for the groups in the order recorded herein. There is some relationship between weeks employed and earnings. Managers were most steadily employed followed by the professional, clerical, skilled, semi-skilled and unskilled. Weeks employed for professional males and females are the same and only in the unskilled groups does the female average exceed that of the males.

Percentages from the table are plotted in Charts 23 and 24, and which show how the group is distributed according to earnings. To give some idea of the variation of average wages of occupations within the group a number of these are plotted on the graph.

There is considerable overlapping between the groups yet the patterns are distinct. The clerical and skilled groups are more alike than any of the others.

Salaries for females are lower than for males in corresponding work groups. All distributions for female workers were bunched nearer to the zero point than those for the males. Skilled, semi-skilled and unskilled females received less on the average than the unskilled males and only the female managerial group received more than semi-skilled males.

Care must be exercised in comparing averages for the sexes. Female employees are a more highly selected group, younger and more inexperienced on the average. Hence they occupy, more often, the lower rungs of the ladder where pay is less for men and women alike.

Table 32. Number and Per Cent of Employees Distributed
According to Specified Income Brackets

			<u>MALE</u>					
			<u>-450</u>	<u>450-949</u>	<u>950-1949</u>	<u>1950-2949</u>	<u>2950-3949</u>	<u>3950+</u>
1. Professional	....	No.	8,707	15,054	29,197	15,926	6,942	4,903
		%	10.7	18.6	36.1	19.7	8.7	6.1
2. Proprietors	...	No.	3,371	6,805	30,142	22,748	10,861	11,878
		%	3.9	8.0	35.1	26.5	12.7	13.8
3. Clerical	.....	No.	55,009	83,749	157,242	35,817	7,932	4,031
		%	16.0	24.4	45.7	10.4	2.3	1.2
4. Skilled	.....	No.	73,839	109,576	191,652	29,158	3,116	583
		%	18.1	26.9	47.0	7.1	0.8	0.1

Table 32. Number and Per Cent of Employees Distributed According to Specified Income Brackets. - Concluded.

MALE - concluded							
		-450	450-949	950-1949	1950-2949	2950-3949	3950 +
5. Semi-skilled	... No.	69,087	120,828	158,557	10,367	732	73
	%	19.2	33.6	44.1	2.9	0.2	0.0
6. Unskilled	.....No.	345,145	205,852	160,363	7,829	358	88
	%	48.0	28.6	22.3	1.1	0.0	0.0
FEMALE							
		-450	450-949	950,1949	1950,2949	2950-3949	3950 +
1. Professional	... No.	29,242	34,781	21,271	2,471	276	37
	%	33.4	39.4	24.1	2.8	0.3	0.0
2. Proprietors	... No.	1,362	1,525	1,174	245	66	30
	%	30.9	34.6	26.7	5.6	1.5	0.7
3. Clerical	..... No.	65,908	112,864	44,386	1,142	99	44
	%	29.4	50.3	19.8	0.5	0.0	0.0
4. Skilled	..... No.	3,746	5,975	1,512	140	8	2
	%	32.9	52.5	13.3	1.3	0.0	0.0
5. Semi-skilled	.. No.	92,310	67,614	4,152	87	6	1
	%	56.2	41.2	2.5	0.1	0.0	0.0
6. Unskilled	..... No.	199,503	29,145	1,598	57	9	-
	%	86.6	12.7	0.7	0.0	0.0	0.0

Marital Status for the Social-Economic Groups by Sex, 1941

Table 33 classifies the members for each of the six groups as single, married, widowed and divorced or separated. Forty-nine per cent of the single males are to be found among the unskilled group, which is not surprising since the greater percentage of those under 20 are in that group. It is the only group in which more than half of the members are single.

The highest number and percentage of married workers are to be found in the proprietor class where only 15.3 p.c. are classed as single. Likewise the largest number and percentage of widowed are to be found among the same group.

Less than 1 p.c. of the professional, proprietor or clerical-commercial males are divorced or separated. Slightly more than 1 p.c. of the skilled, semi-skilled and unskilled groups are in that category, with the skilled being highest with 1.3 p.c. divorced or separated.

In the groups for females 92.2 p.c. of the professional women, 87.9 p.c. of the clerical-commercial group, and from 74 to 79 p.c. of the unskilled, semi-skilled and skilled groups are single. Only 26.5 p.c. of the proprietor group are single, while 21.5 p.c. are married, 47.2 p.c. are widowed and 4.8 p.c. are divorced or separated. The smallest percentage of divorced or separated is found in the professional group in part probably due to admission requirements demanding more and longer preparation for entrance.

It should be noted that marriage alone has been considered; no figures are given for size of family. Census studies on fertility indicate that the size

of family in the professional group is extremely low and there is a tendency for the number in the family to increase as we go from class to class with the unskilled groups having considerably larger families on the average.

Table 33. Marital Status by Sex for the Social-Economic Groups, 1941

<u>Group</u>		<u>Single</u>	<u>Married</u>	<u>Widowed</u>	<u>Divorced or Separated</u>
<u>MALE</u>					
1. Professional	No.	41,351	72,380	2,298	900
	%	35.4	61.9	2.0	0.7
2. Owner-manager	No.	131,668	688,017	35,134	6,464
	%	15.3	79.9	4.1	0.7
3. Clerical-commercial	No.	142,766	233,244	7,876	3,653
	%	37.5	59.6	2.0	0.9
4. Skilled	No.	132,209	372,376	17,470	7,116
	%	25.0	70.4	3.3	1.3
5. Semi-skilled	No.	132,437	256,516	8,776	4,979
	%	32.9	63.7	2.2	1.2
6. Unskilled	No.	559,059	405,167	25,602	10,773
	%	55.9	40.5	2.5	1.1
<u>FEMALE</u>					
1. Professional	No.	116,844	5,927	2,922	1,017
	%	92.2	4.7	2.3	0.8
2. Owner-manager	No.	8,091	6,576	14,427	1,465
	%	26.5	21.5	47.2	4.8
3. Clerical-commercial	No.	204,758	17,565	6,164	4,329
	%	87.9	7.5	2.6	2.0
4. Skilled	No.	8,916	1,528	611	419
	%	77.7	13.3	5.3	3.7
5. Semi-skilled	No.	70,011	11,554	4,463	2,825
	%	78.8	13.0	5.0	3.2
6. Unskilled	No.	209,746	33,757	26,044	12,788
	%	74.3	12.0	9.2	4.5

PART IV. OCCUPATION GROUPS

1. AGRICULTURE

In the previous sections an attempt was made to present certain phases of the occupational scene in Canada. The underlying assumption was: that youth can come closer to solving its problem of occupational choice, and those doing guidance and counselling can offer wiser suggestions if they can interpret the current state of the labour market in the light of a longtime view of our expanding industrial organization.

This chapter offers pertinent information for guidance in the rural areas. Continuous movement of farm youth to the urban areas has been observable for many years. It is in part due to the number of children born on farms being greater than the number of farm operators needed. It is encouraged by a fair percentage of farmers, particularly in the West, who have made it almost a tradition to attempt to persuade their sons and daughters to move off the farm. It is part of a North American tradition which encourages people to "better themselves", which is taken to mean the obtaining of a position in the urban areas.

Since a fair percentage of farm youth will seek work outside the community, while others will make farming their life work the unavoidable conclusion is that a guidance program in rural areas must provide for the members of both these groups. No farm community would benefit in the long run from a guidance program which focused all its efforts on those choosing one or other of the branches of agriculture at the expense of those who will leave the farm. To the present there has been a tendency to direct most schooling towards those few who may enter the professions while agricultural information is too often treated as an adjunct and organized to fit the academic pattern.

Where economic conditions are such that a rural area cannot afford adequate guidance service for both groups, since the urban area will receive a fair percentage of those reared on the farm, it is not only fair but wise for them to accept part of the responsibility for providing not only guidance but a milieu in which this guidance will be most effective.

Vocational guidance is not concerned merely with having youth make a decision as to the choice of occupation, but is a continuous process which should begin in early life, affect courses and subjects taken in school, and continue many years after the school career is ended and, for example, until the actual ownership or management of a farm becomes a fact. This is necessary as there is usually a gap of some years before the school graduate is in a position to take over ownership.

Youth, who consider farming a life work, should know among other things: what return they may reasonably expect over the course of years; the problems and difficulties they are likely to encounter; the total cost of a farm, equipment and livestock for it, and the cost of operation; as well as how to select a district and farm on which to establish themselves. To supplement this they should know the advantages and disadvantages of share-cropping, renting and ownership. Farm youth who will fall heir to the family farm will not be greatly interested in several of these.

Farm youth should know that farming, to many, is more than a job; it is a way of life. Those who enter it wholeheartedly and find satisfaction in it will undergo privations and hardships to maintain such position in preference to a berth in a trade, commerce or service. Nor is it enough that a farmer live to himself. Instead he should think of the possibilities for community work. Farming is more

than a cropping of the land, a grazing of the pastures or making of the land to bear fruit in other ways.

Farming occupies a unique if not always an enviable position in the Canadian economy. It began as a means of ensuring possession of the country while at the same time providing support for the staple products of fish, fur and timber. It reached the second stage by the middle of the nineteenth century with Canada exporting wheat, dairy products and livestock. This trade soon put agriculture into first place where it remained until the depression of the thirties. Most of the good land and considerable marginal land had been settled before that time and farming was fairly stable. During the depression years a long period of drought affected the western farmers in particular - but at that their main crop, wheat, was a glut on the market. Not until the war had lasted for some time was the position of the farmer comparable with that held before the depression.

At the time of Confederation the population was predominantly agricultural. Four-fifths of the people lived on the farms or in small communities in rural areas. By 1941 only about 45 p.c. of the people could be classed as rural and the movement since that time has been away from the farm. Despite this migration towards the urban areas the farm population has nearly doubled since 1867. When it is considered that the population of Canada as a whole has increased about 313 p.c.; that the farm has maintained a higher birthrate than the urban areas and that a fair percentage of new immigrants to Canada have settled on farms, some idea may be obtained of the movement from farm to city.

In the West many homesteaders settled on a quarter of a section but found it insufficient. In the shuffle which followed many moved to town and city while the others increased their holdings. Larger farms with fewer workers but more efficient machinery became the rule in the West.

Despite the number moving off the farms those remaining have produced more, decade by decade. In the period after Confederation about half of the population were needed in agriculture to feed the Canadian people. Today one-quarter of the population can do the job with a greater margin of safety, or in other words, with more to export than previously. This steady increase in the productivity of the average farm worker is reflected both in ways of farming and in the changing economy of which farming forms a part.

During the past eighty years the face of Canada has seen vast changes -- from sickle and scythe to threshing machine and combine; from ox-cart and buck-board to truck and tractor; from free homesteads to scarcity of good land; from pioneering to an industrial civilization.

While the importance of farming has not changed, its relative position has. Value of agricultural production around 1925 was 41 p.c. of the net value of all production; in 1939 it was but 26 p.c.

The economic structure is continuously changing, sometimes slowly to meet changing consumer wants or to absorb new inventions and sometimes rapidly to meet wartime needs, a decided shift in public policy or a wave of mergers. These are reflected in the agricultural income over the years. Considering the inter-war period, agriculture was relatively prosperous during the twenties, but due to the world-wide depression, drought and generally bad trade conditions during the thirties farm produce was at a low ebb in both quantity and price. This set-back was augmented by many European countries adopting a policy of self-sufficiency. Average annual income in agriculture dropped from \$856 million in the first inter-war decade to \$495 million in the second.

Increase in Farm Products:

The demand for farm produce increased during the war years. Stock piles of surplus wheat dwindled despite bumper crops which reached an all-time high in 1942. In 1871 the 1.6 million acres sown to wheat yielded 16.7 million bushels, whereas, in 1944 the 23.3 million acres of wheat yielded 435.5 million bushels. This increase of some 2608 p.c. was not duplicated in the other grains but the increase in each has been considerable. Oat acreage increased from 3,961,356 acres in 1891 to 14,315,000 acres in 1942, while barley increased from 868,464 to 7,291,000 acres, corn from 195,101 to 270,000 acres, potatoes from 490,190 to 535,000 acres and hay and clover from 5,931,548 to 10,120,000 acres for the same period. While bushels per acre vary considerably from year to year, the trend has been towards a higher yield.

Raising the livestock increased greatly over the same period. The number of milk cows doubled between 1871 and 1901 and increased by half as much again by 1944. The number of sheep raised in Canada has fluctuated some from time to time and was about 10 p.c. greater in 1944 than in 1871. Swine, like beef cattle, react to the market rather rapidly yet have shown a fairly consistent rise from 1871 to 1944, an increase of about 500 p.c. From 1901 to 1944 poultry increased from just under 18 million in 1901 to more than five times that number by 1944.

Whereas milk cows, beef cattle, sheep and swine are associated with food supplies and have increased in number, this is not true of the horse. Its two main functions, transportation and power, have been replaced by mechanical means which are easier to control and not subject to the same limitations of speed, power, etc. Hence number of horses provided some index of growth until the second decade of the twentieth century and since then **has** provided some index of conversion to mechanical power. Just as the horse replaced the ox on many farms as it was faster and more subject to control, so, in turn, tractor and truck replaced the horse as they allowed for the concentration of power, larger machinery and fewer men, and did not require feed and care when not in use.

Figures for dairy products are indicative of the increase in products other than wheat. About three times as much milk was produced in 1944 as in 1881. For the same period cheese-making increased by from three to four times and creamery butter by 225 times. This may be accounted for in part by the fact that only half as much dairy butter was produced in 1943 as in 1881 as farmers sold cream and bought butter.

The years 1942-4 paint a much better than average price picture for agriculture. They point to conditions brought about by war-time demands. Whether such conditions will continue **for** long will be determined largely by world markets. The need will be present for some time but a steady economic demand based on ability to pay depends largely on national and international policy and the economic recovery of a large part of the world.

Trend in Farm Size:

Acreage of land used for farming increased from 45.4 million to 174.8 million acres from 1881 to 1943. In 1881, 22 million of these acres were classed as improved, by 1941, 92 million acres fell in that category. In 1881 this land averaged parcels of 33 acres per farm worker, in 1901 42.1 acres, in 1921, 67.9 and in 1941, 79 acres. This increase reflects the introduction of new and better power machinery and farming carried on in a big way. The 79 acre average was closest to the average for Ontario, considerably above that for British Columbia and below that for the Prairies, giving the number of improved acres per farm for

five regions of Canada (1941) as follows:

	<u>Acres</u>
Maritimes	35
Quebec	60
Ontario	70
Prairies	220
British Columbia ...	30

The actual farms on the average have shown the same trend, increasing from 198 acres in 1921 to 238 acres in 1941. Quebec is the only province where this movement is not yet observable; elsewhere improved methods and power machinery have resulted in one man being able to crop more land. The unit in the East has been around 100 acres, but in the West the quarter section, 160 acres, was inadequate for grain farming or cattle raising. Today the average farm in Alberta and Saskatchewan contains 433 acres.

Income:

Farmers on the average react rapidly to changes in income. Western farmers speak jokingly of the "next-year country" a true indication that they are surprisingly optimistic when crops fail and sure they will have "seven full years" each time they harvest a bountiful crop. From an all-time high of over a billion dollars, for cash income from farm products in 1928 the total dropped to yield a low of \$377,000,000 in 1933. The prolonged series of crop failures in the West coupled with low prices reduced many farm owners to tenants. In 1941 in Manitoba only about two-thirds of the farms were operated by owners while in Saskatchewan the proportion was a little over half. On the other hand in Quebec, from 1901 to 1941, the percentage of owner-operators increased from 90 to 93 p.c.

But of the full owners representing 75 p.c. of all farmers who operated their own farms, 48 p.c. reported mortgage indebtedness. The position of Saskatchewan farmers was worst with 75 p.c. having either a mortgage or agreement of sale over their heads. Alberta and Manitoba came next. Ontario was about half-way down the list and Nova Scotia came last. In 1941, apart from short term and intermediate loans, debts reported by farmers totalled \$629,200,000, an average of \$2,372 per farm despite what had been written off since the "depressed thirties".

Technological Progress:

Technological progress is observable in many aspects of farming. The number of tractors increased from 47,500 in 1921 to 159,000 in 1941. This takes no cognizance of the increased efficiency of the modern implements which would still further alter the picture. By 1941 there were 391,600 automobiles and trucks on the farms and the number of combines, replacing both binder and threshing machine, doubled between 1931 and 1941. Such machines, including tractors and combines, were adopted for large and small farms. Mechanization of farming has by no means reached its peak.

Science has also brought forth improvements through plant and animal breeding, such as: rust-resistant wheat, hybrid corn, earlier-maturing and heavier-yielding crops, better-feeding beef animals, higher milk-producing cows, and better egg-laying hens. It has also introduced improved chemical fertilizers. All of these have added to the productivity of each farmer -- and the end is not yet.

Yet comparatively few farms have modern buildings. There is a vast backlog of building, painting and repairing which has been accumulating since the

thirties when farms became down at the heel and which was not alleviated during the war years when the farmers were too busy to do the work and could not get help or supplies.

Knowledge of all this is important to anyone preparing to take up farming as a life work. Buying a large improved farm requiring considerable expensive equipment today is not to be compared with starting out with a yoke of oxen, a few implements and supplies which could be loaded into a wagon and a homestead which was there for the taking. Farm values fluctuate. In 1921 the average value was slightly over \$9,000 per farm while in 1939 it had dropped to less than half that figure. Since then it has risen somewhat.

While anyone selecting farming as a career would probably not expect to purchase even an average farm yet the capital needed is enough of a stumbling block, particularly where the long-time returns would not seem to justify paying a high rate of interest. Nor is there an average figure for Canada. Farming is done in specific areas and the newcomer will be influenced by other farms in the district. His needs will depend largely on the locality in which he decides to settle.

Types of Farm by Province, 1940:

Most of the types listed in the census require no explanation beyond the fact that where 50 p.c. or more of gross income is received from one type of product such farm is classified by such products. "Subsistence farms" are those on which 50 p.c. or more of the products produced are consumed on the farm. The preliminary figures used in this report indicate that 26.5 p.c. of all farms were "subsistence and combination of subsistence and other product farms". These were found chiefly in New Brunswick, 53.7 p.c., Nova Scotia, 53.1 p.c., Prince Edward Island, 47.1 p.c. Quebec, 40 p.c. and British Columbia, 27.2 p.c. Mixed farms accounted for 18.4 p.c. of the total and were the main type in Ontario while "grains and hay farms", 23.7 p.c. of the total, predominated in the Prairie Provinces. More detailed information on types is obtainable in Table 34.

Table 34. Type of Farm, by Province, Canada, 1940

Type of farm as determined by main source of revenue in 1940	Canada	Prince Edward Island	Nova Scotia	New Brunswick	Quebec
Total number of occupied farms (1)	732,858	12,230	32,977	31,889	154,669
Grains and hay	173,778	294	739	797	3,732
Potatoes, roots and other field crops	8,457	822	110	770	1,494
Vegetables, fruits and nursery products	15,025	30	1,167	182	2,027
Dairy products	47,608	173	2,335	1,254	15,726
Poultry	7,204	59	293	175	911
Live stock	65,585	923	971	621	4,533
Forest and apiary products	14,992	44	1,201	1,951	8,168
Subsistence and combinations of subsistence	194,573	5,765	17,514	17,112	61,936
Part-time	40,434	744	4,010	4,355	12,828
Mixed farming	134,717	2,950	3,851	4,049	34,859

(1) Includes 30,485 farms not classified as to type in 1940.

Table 34. Type of Farm, by Province, Canada, 1940 - concluded.

Type of farm as determined by main source of revenue in 1940	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon
Total number of occupied farms (1)	178,204	58,024	138,713	99,732	26,394	26
Grains and hay	6,630	22,656	90,828	46,619	1,478	5
Potatoes, roots and other field crops	3,971	188	50	736	310	6
Vegetables, fruits and nursery products	7,381	273	115	187	3,660	3
Dairy products	21,478	1,451	822	987	3,382	-
Poultry	3,258	325	149	191	1,843	-
Live stock	35,564	4,042	4,327	12,744	1,858	2
Forest and apiary products	2,571	407	315	116	219	-
Subsistence and combinations of subsistence	34,824	13,735	21,913	14,580	7,191	3
Part-time	7,065	1,750	2,762	3,447	3,467	6
Mixed farming	46,138	11,925	12,029	16,575	2,340	1

(1) Includes 30,485 farms not classified as to type in 1940.

Farming Personnel:

The number gainfully employed in agriculture showed an increase for census years until 1931 and was down slightly in 1941 if those on active service from the farms are included, but decreased by some 50,000 if they are omitted. Table 35 gives the number and per cent gainfully occupied in agriculture for census years from 1891 to 1941, and the percentage these are of all gainfully occupied males and females.

Of the 1,064,847 males gainfully occupied in agriculture, 1941, there were 170,000 owners who hired help and 460,700 who operated their farms without any or with but casual seasonal help. There were 2,850 foremen who received wages and 184 who did not while 176,200 of the farm help were paid and 254,900 were unpaid helpers. Most of those unpaid were the sons of farmers working on the farms of their parents.

Of the 18,970 females gainfully occupied in agriculture 5,245 were employees; 8,818 managed their farms without outside help, 17 were paid foremen, 18 were unpaid foremen, 1,724 were paid labourers and 3,147 were not paid.

Farm women, of whom there were about 785,000 in 1941 from ages 14 to 64, are not included in these figures although many of them do considerable work in the fields and farmyards and contribute directly to the farm income.

Many of the farm helpers were not employed for the full year. During the war years they had little trouble obtaining employment when they were not needed on the farms. National Selective Service regulations provided that farm workers must have a permit for work other than agriculture which lasted 60 days or more. According to the records in 1945 about 70 p.c. of farm workers seeking off-season employment were employed in fishing, forestry, trapping and manufacturing. The other 30 p.c. were distributed throughout the other occupations.

Chart 25

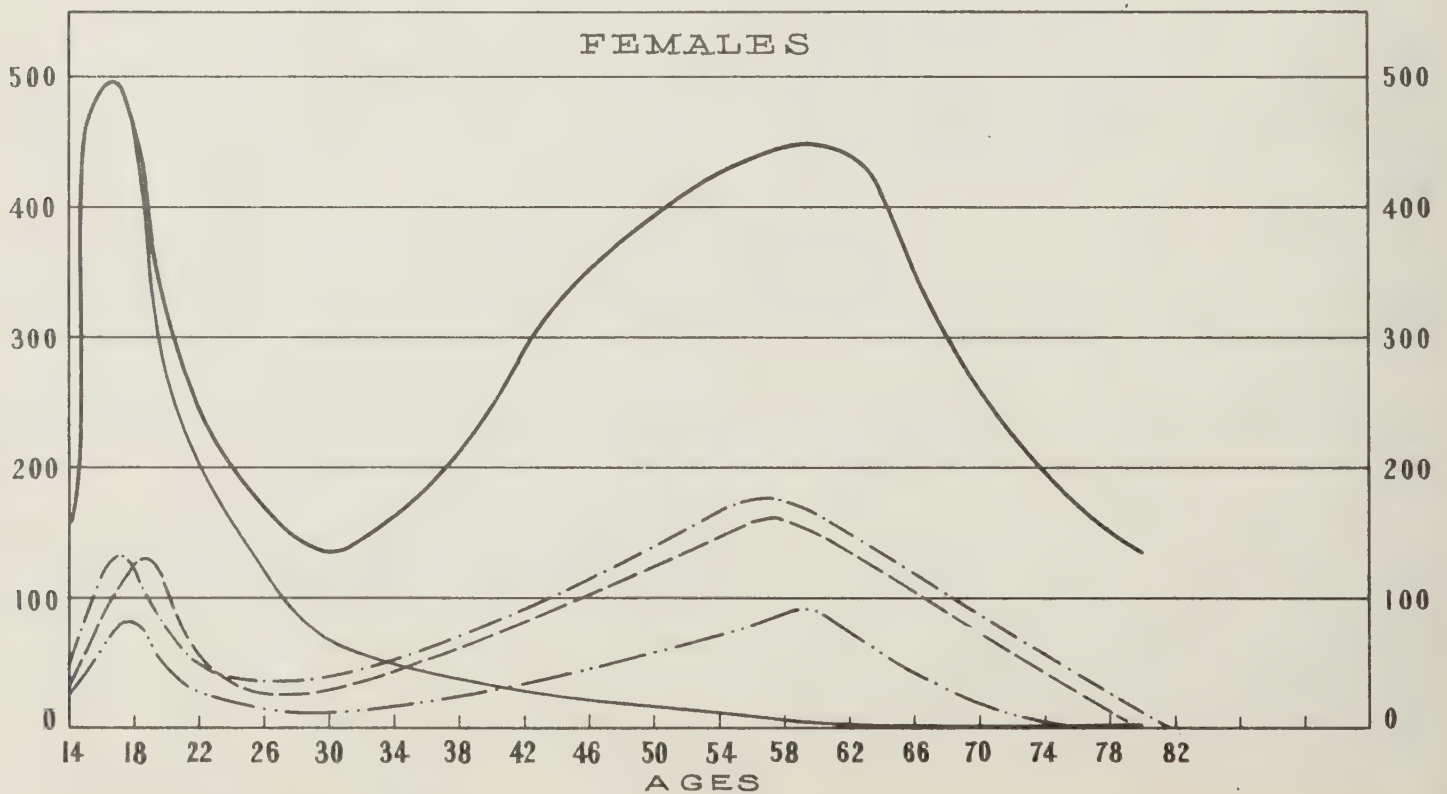
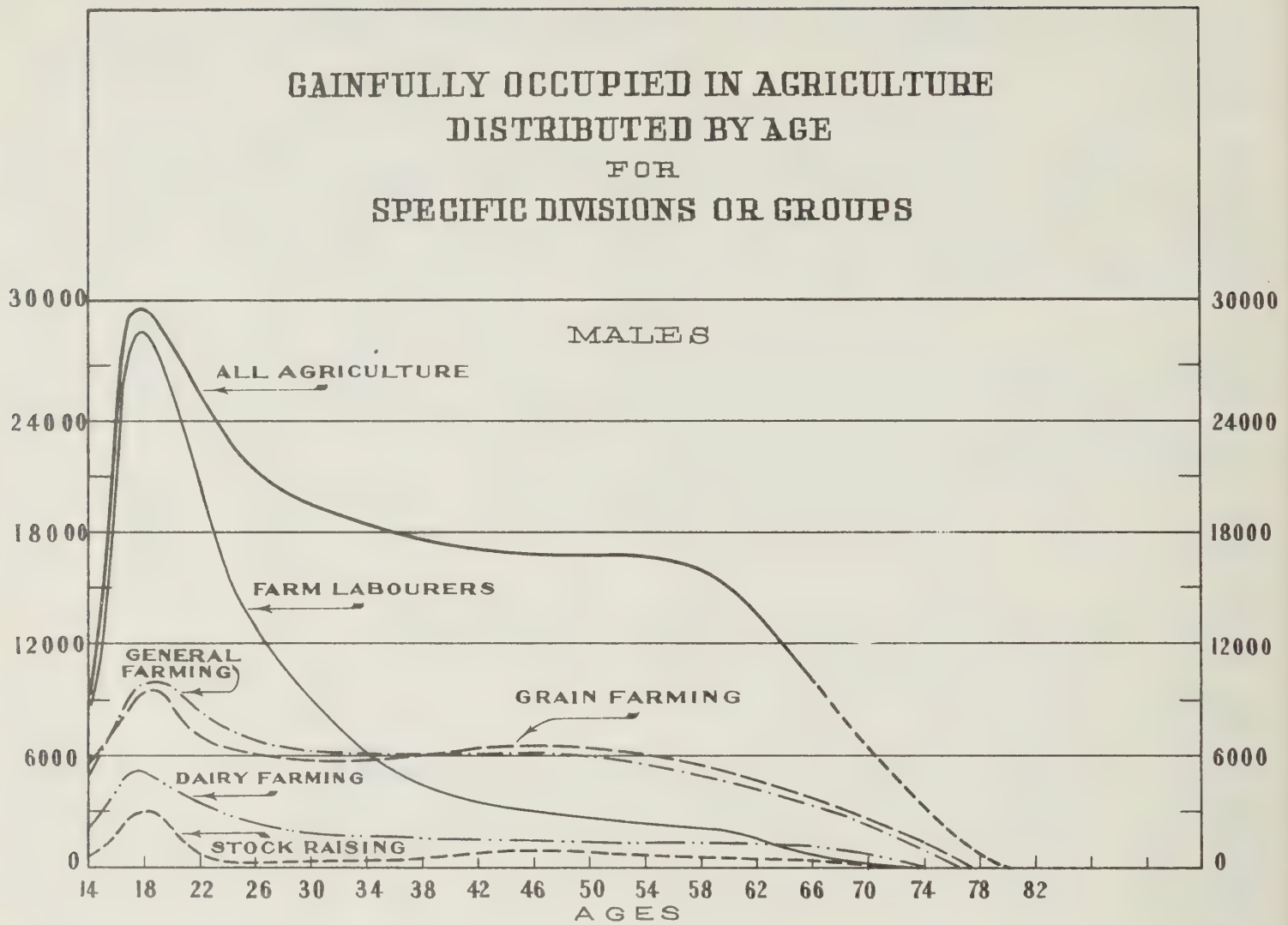


Table 35. Number and Per cent of the Gainfully Occupied Males and Females, 10 Years of Age and Over, in Agriculture for Canada and Regional Divisions, 1891 - 1941 Censuses.

	1891	1901	1911	1921	1931	1941 ^x
	No.	No.	No.	No.	No.	No.
Males -						
Canada	723,018	707,924	917,848	1,023,661	1,107,766	1,064,847
Maritime Provinces	131,021	121,860	111,141	111,808	108,877	94,420
Quebec	204,552	194,381	201,599	217,416	225,914	251,539
Ontario	332,037	302,533	301,347	289,701	298,597	264,914
Prairie Provinces.	47,184	78,906	279,724	370,358	435,169	413,832
British Columbia .	8,219	10,244	24,037	34,378	42,209	40,142
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Canada	51.19	45.82	38.91	38.15	33.97	31.66
Maritime Provinces	50.22	45.98	39.66	37.67	35.42	31.54
Quebec	51.26	44.68	36.51	33.63	27.44	27.09
Ontario	52.21	46.86	36.04	31.37	27.23	23.14
Prairie Provinces.	66.02	64.32	55.85	59.53	55.80	56.04
British Columbia .	18.27	13.38	12.69	17.70	16.08	15.49
Females -						
Canada	12,194	8,936	15,887	17,883	24,079	18,969
Maritime Provinces	3,416	2,967	3,027	2,934	2,849	1,596
Quebec	2,766	1,540	3,017	3,620	4,633	3,544
Ontario	5,512	3,898	5,690	5,370	6,690	5,353
Prairie Provinces.	410	436	3,748	5,216	8,478	7,064
British Columbia .	90	95	405	743	1,429	1,412
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Canada	6.00	3.76	4.35	3.65	3.62	2.28
Maritime Provinces	8.24	8.30	6.75	5.57	5.24	1.65
Quebec	4.73	1.99	2.98	2.60	2.29	1.32
Ontario	5.76	3.59	3.67	2.76	2.68	1.70
Prairie Provinces.	7.49	3.77	7.91	6.71	7.32	5.23
British Columbia .	2.87	2.00	2.44	2.91	3.27	2.56

^x Males 15 years of age and over. Omitted are 39,732 males on Active Service.

Figures 25A and B show the distribution of male and female agricultural workers according to age for several divisions or branches, 1941. The graphs for males show the comparatively early age at which many farm boys begin to help on the farm. The peak was reached at from 18 to 20 when the majority of farm boys had left school and were helping on the farm. After that age the number leaving the farm far exceeded the number entering farming. By age 22 the movement had slowed down although the curve did not flatten out until about age 40. There was little change in number until age 55 when the number began to fall off and continued falling to the end. There is a similarity in all the graphs for the various branches of farming shown although the trend is more marked in some than in others.

The curve for females would be somewhat similar though more pronounced if only farm workers were concerned. However census data do not consider farm girls

helping at home as farm workers and farmers' wives are not enumerated as gainfully employed in agriculture. But should anything happen to the husband and the widow remain on the farm she would be classed as a farm owner. The curve accelerates rapidly at age 17, drops rapidly to age 30, then mounts to age 60 when it begins to drop and continues decreasing to the end. At no age is the number included large. The total is about one-quarter that of the number of farm women.

Distribution of Workers among Various Types of Farming:

Farmers and their helpers were distributed among the various types of farming as shown in Table 36. The number not-at-work on the census date is included to give some idea of unemployment in the summer of 1941.

Table 36. Gainfully Occupied Workers in Agriculture Distributed in Selected Branches of Agriculture, and Number not at Work, June 2, 1941

Branch of Agriculture	Total	Male	Female	Not at Work June 2, 1941
Beekeeping	95	93	2	12
Dairy farming	14,742	14,575	167	1,059
Flower and seed culture	3,385	3,195	190	314
Fur farming	944	925	19	62
Fruit farming	3,438	3,253	185	518
Gardening, truck farming	7,430	7,329	101	1,021
Grain growing	10,894	10,836	58	2,350
Mixed farming	151,583	150,610	973	24,821
Poultry raising	799	760	39	79
Stock raising	2,620	2,598	22	248
Other	2,662	2,501	161	242

Education:

Number of years in school varied greatly for the male population in agriculture (Table 37). About 15.5 p.c. had less than five years schooling, another 65.2 p.c. completed from 5 to 8 years, 18 p.c. more began high school and some of them were graduated. About 1.29 p.c. spent 13 or more years at school. The largest numbers of the latter are to be found in general farming, grain farming, or dairy farming, although they represent a larger percentage of the more specialized lines such as fur farming and flower culture.

On the average the females employed are better educated than the males. About 11 p.c. of them had less than 5 years of schooling, 45 p.c.; between 5 and 8 years, 39 p.c.; some or all of high school and 5.42 p.c. 13 or more years at school.

The enrolment of full-time undergraduate students of the regular session in degree courses in agriculture increased from 856 in 1921, to 1,373 in 1941, but dropped to 1,140 in 1942. Enrolment for the diploma courses during the same years dropped from 415 in 1921 to 389 and 225 for 1941 and 1942, respectively. Continuous graduation comparable to the best year would in time result in about 0.9 p.c. of the total population, or 2.1 p.c. of the farm population having some university courses in agriculture.

Table 37. Males, Gainfully Occupied in Agriculture, 14 Years of Age and Over, Distributed in Percentages by Years of Schooling

Years of Schooling	0-4	5-8	9-12	13+
All agriculture	15.58	65.10	18.03	1.29
Farmers and stock raisers	18.43	62.39	17.50	1.68
Farm foremen	7.31	52.75	32.36	7.58
Farm labourers	11.39	69.06	18.63	0.92
Dairy farmers	12.97	69.74	16.14	1.15
Flower culture	9.57	53.53	31.41	5.49
Fruit farming	11.02	52.24	31.97	4.80
Fur farming	9.38	48.63	35.88	6.11
General farming	15.58	62.00	17.02	5.30
Grain farming	16.52	64.15	18.11	1.22
Poultry farming	9.28	52.33	32.50	6.89
Stock raising	13.25	68.74	16.74	1.17
Vegetable gardening	22.63	56.88	18.51	1.98
Other production	13.57	65.38	19.13	1.92
Agriculture - females	10.86	44.76	38.96	5.42
All industries - males	13.56	49.53	32.81	4.10

A fair percentage of the graduates in agriculture are not employed in actual farming but are employed in research by the governments, private industries, etc. This percentage of specialists, at best, is probably too low if agriculture is to go ahead rapidly.

Conjugal Condition of Those Gainfully Occupied in Agriculture:

About three-quarters of the farmers and stock raisers were married men. Another 3 to 4 p.c. were widowed while less than 1 p.c. were divorced or separated. Eighty per cent of the farm labourers were single which is not surprising considering that 50 p.c. of them were 22 years of age or younger. Some are youth, maturing on the farm, who will move off later. Others are saving up to buy their own farms while still others will inherit the family farm.

Table 38. Percentages in Agriculture Who are Single, Married, Widowed, and Divorced or Separated

	Number	Single p.c.	Married p.c.	Widowed p.c.	Divorced or Separated p.c.
Males					
All agriculture	1,064,847	42.22	53.92	3.22	0.64
Farmers and stock raisers ..	630,709	16.46	78.55	4.34	0.65
Foremen	3,036	22.66	73.68	3.00	0.66
Farm labourers	431,102	80.03	17.77	1.57	0.63
Females					
All agriculture	18,969	31.78	10.31	54.19	3.72
Farmers and stock raisers ..	14,063	11.34	11.68	72.42	4.56
Forewomen	35	71.43	11.43	17.14	-
Farm labourers	4,408	90.49	6.36	1.85	1.29

The majority of women included are not married. More than three-quarters of those classed as farmers or stockraisers are widowed or divorced while more than 90 p.c. of the farm labouring women are single. Farmers' wives are not included although they may have been doing more than housework. Table 38 contains tabulated data on the conjugal state of those gainfully occupied in Agriculture.

Average Wages of Male Farm Help:

Wages for farm help were high during the war years as compared with the years before. Using 1935-39 as base years for its index the Dominion Bureau of Statistics found wages increase from 108.0 for 1939 to a high of 203.0 in January and 287.3 for April, 1944. At no time from 1922, when the index began, until 1939 was it as high. The previous highest point was reached in 1928 at 184.7.

Actual average wages may be observed from Table 39.

Table 39. Average Wages of Male Farm Help per Day and Month,
May 15, 1944, August 15, 1944 and January 15, 1945

	<u>With Board</u>					
	<u>Per Day</u>			<u>Per Month</u>		
	<u>May</u>	<u>August</u>	<u>January</u>	<u>May</u>	<u>August</u>	<u>January</u>
	\$	\$	\$	\$	\$	\$
Prince Edward Island ...	2.70	2.45	2.18	47.66	49.42	45.45
Nova Scotia	3.40	2.94	2.89	53.88	55.12	54.41
New Brunswick	3.68	3.02	3.00	63.33	66.83	68.11
Quebec	3.21	2.73	2.66	56.22	61.04	58.47
Ontario	3.78	3.26	2.87	56.39	59.13	53.96
Manitoba	3.78	4.49	2.41	63.89	71.46	50.40
Saskatchewan	4.00	4.58	2.45	69.83	75.27	51.12
Alberta	3.78	3.78	2.65	68.25	72.31	58.22
British Columbia	4.00	3.53	3.36	65.47	70.33	66.13
Canada	3.58	3.76	2.66	61.38	67.92	54.55

Normally wages are lower in winter than summer and best in the fall during harvesting, followed by the spring. This is particularly true for grain growing areas. Where mixed farming is most common hired help is often needed the year round.

The above figures are for wages where board is provided. Where it is not provided wages are higher. Some idea of wages without board may be obtained by adding about 82 cents to the daily wages given and \$21 to the monthly wage although it should be remembered that men working without board are a somewhat different group from the usual hired man.

Agriculture and the Future:

Farmers are intensely interested in the position which this basic industry will occupy after the war. Canada's needs for food, clothing and shelter may be predicted with some degree of accuracy, but such demands could not absorb the average yield. Prediction of foreign trade involves too many factors to admit of a fair degree of accuracy. While a number of new synthetic products processed from agricultural by-products such as protein paints, synthetic fibres, etc. are on the market it is too early to predict either their relative importance

or the amount of farm products which will be needed to produce them.

Certain trends have been noted such as that towards larger farms, mechanization of work, co-operative marketing and modernization of the farmstead. In 1941 there were more Ontario farms reporting automobiles, and telephones, 37 p.c. and 70 p.c. respectively, than in the other provinces. British Columbia led in percentage with radios, 69 p.c., and electricity, 36 p.c., Quebec had the smallest percentage of farms with automobiles, 24 p.c., radios, 36 p.c., and telephones 16 p.c. while the Prairie Provinces reported electricity on but 6 p.c. of the farms. These data indicate some degree of modernization and point to the direction in which progress will be made. Agriculture has made relatively little use of electricity so far except in Ontario and British Columbia. Post-war plans in most of the provinces call for considerable expansion of power lines. This is expected to result in extensive use of power in dairying, poultry production, and such.

Despite the trend towards larger farms, on the average there is also noticeable an increase in the number of specialty farms producing for a specific market. Increased urban settlement should increase the market for a limited number of such holdings most of which will be located near metropolitan areas. There is also the possibility of increasing the number of fur farms, etc., which however, will be located near a suitable food supply.

2. OTHER PRIMARY OCCUPATIONS

1. Fisheries and Fishing

Fishing was perhaps the first industry carried on by Europeans in the New World. They discovered the fish banks off Newfoundland, Labrador and the Maritimes, caught their fish, dried or cured them and sailed back to Europe to dispose of them on the European market. A few settlements were attempted to aid in this lucrative, if somewhat precarious trade. However, fishing did not expand greatly until settlers came first to take part in the fur-trade and later in agriculture. Now we know that two of the four great sea-fishing areas of the world border on the east and west of Canada.

While the catch from the sea is by far the greatest nevertheless the inland waters, rivers and lakes contribute about one-seventh of the total. Value of the catch varies according to world trade and weather conditions. The peak value for all time was reached in 1943 at \$85,858,358. At the top of sales was salmon followed by lobster, cod, herring, and 29 other species each netting \$20,000 or more a year. Also contributing substantial amounts to the total were the vitamin and industrial oils (\$5,576,713).

The fishing industry employed about 1.0 p.c. of those gainfully occupied and contributed from 0.5 p.c. to 1.0 p.c. of the national income. Its pre-war limit was determined mainly by the economic demand for its products but during the war years it would probably have expanded if it had not been for shortages in manpower and materials. A readjustment will inevitably follow during the next few years but its nature will be determined by trade conditions and the pull exerted by other industries for manpower, materials, etc. .

Growth of the fishing trade may be observed from the following values for the annual catch for census years from 1871 to 1941.

1871	.....	\$ 7,573,199	1911	.....	\$ 29,965,142
1881	.....	15,817,162	1921	.....	34,931,935
1891	.....	18,977,874	1931	.....	30,517,306
1901	.....	25,737,152	1941	.....	62,258,997

Between 1925 and 1930 the value of fisheries in Canada fluctuated between 47 and 56 million dollars. Then the annual valuation dropped until it was slightly below \$26 million in 1932; slowly climbed back to 34 million by 1934, remained around 38 to 40 million dollars until 1939 then with the increased war demand it shot upward year after year until it reached \$85,524,500 in 1943. Adjustment of these values to allow for changes in the index of the dollar would reduce the 1925 to 1930 evaluation from 40 to slightly above 45 million dollars; have little appreciable effect on the 1932 valuation; increase the values to 1936; reduce them slightly from then until it would be slightly above 72 million dollars in 1943. In any case the drop during the depression of the thirties is noticeable as is also the rise during the war years recorded.

Behind this trade there is an investment of \$25,104,273 in capital equipment for the sea fisheries which ranges from steam trawlers and diesel vessels to row boats, and from ice and smoke houses to lobster nets. In addition more than \$6,000,000 is invested in inland fisheries and over \$30,000,000 in fish processing establishments.

To encourage and develop this industry legislation was passed as long ago as 1885 to provide for an annual distribution of bounties among fishermen and owners of fishing boats. The amount was increased to \$160,000 in 1891 and remained at that figure.

To prevent depletion of the fish resources, the Federal Government has enforced closed seasons, forbidden pollution and obstruction and made regulations concerning nets, gear, and fishing operations generally. It has further operated (1940) 14 hatcheries, 6 rearing station, 7 salmon retaining ponds and several egg-collecting stations. Other assistance consists of radio reports to fishermen concerning weather conditions, bait and ice supplies, etc. The Department of Fisheries has also provided fishermen with special instructions for handling, curing, etc. In this work the Federal Fisheries Branch works in co-operation with authorities in the provincial governments.

The Fishermen:

The situation for Canadian fishermen would be easier if Canadians would use more fish. The average catch would provide 120 pounds per year for each man, woman and child, whereas we eat only 30 pounds on the average. This difference must be made up by export. During the war period there was no trouble disposing of the catch and the lot of the fisherman consequently improved as his wages increased.

In 1943 there were about 61,000 fishermen of whom three-quarters were engaged in sea-fisheries. Another 15,900 workers were employed in processing the fish. Few women are employed in actual fishing but more are to be found in the canneries.

Occupational Status of the Fishermen:

Of the fishermen listed in the 1941 Census 1.3 p.c. were classed as employers; 74.2 p.c. as own account, 20.2 p.c. as employees and 4.3 p.c. as no-pays.

As expected, data from the census indicated a preponderance of small fishermen owning their own equipment and working along or with members of their family.

Age and Marital Status:

The age distribution of males employed in fishing was about the same as the average for all occupations. Twenty-five per cent were 27 years of age or younger and another 25 p.c. were 52 years or older. The average age was 37 years.

The conjugal condition of these fishermen was: 38.31 p.c. single, 56.72 p.c. married, 4.02 p.c. widowed and 0.95 p.c. divorced or separated.

Years at School:

The number of years spent at school would indicate a need for such classes and instruction as is carried on by the Department of Fisheries. More than one-quarter (26.38 p.c.) had 4 years or less of schooling. More than half (58.41 p.c.) had from 5 to 8 years. Slightly more than one-seventh had from 9 to 12 years or some high school work while less than one out of a hundred (0.68 p.c.) had 13 years or more.

Earnings:

Earnings reported by fishermen in 1941 were low. About 65 p.c. of them received less than \$450; another 27 p.c. received from \$450 to \$949 while about 7 p.c. received from \$950 to \$1,949 and less than 0.5 p.c. (32) received between \$1,950 and \$2,949. At that incomes were considerably higher than during the depression but not so high as during the following war years. According to census figures average earnings for wage-earning fishermen were \$460 in 1931 and \$409 in 1941, whereas according to an estimate,^x by October 1944 the average earnings were nearly \$1,000.

Wages were highest in Ontario with more than two-thirds receiving \$450 or more. They were second highest in British Columbia where about 60 p.c. received \$450 or better. They were lowest in Quebec followed by the Maritimes. Only four of the 47 fishermen in Saskatchewan and Alberta received more than \$950 a year. In 1941 fishermen on the average were employed 27.54 weeks.

The Future of Fishing:

Regulations were deemed necessary to prevent fishermen disturbing the fish at spawning time and causing the supply to be depleted in a few years. One of these restricts the fishing season and limits the weeks fishermen may work. This is, however, a regular occurrence and not to be compared with lack of trade outlets which cause fish to become a glut on the market. During the depression the position of the fishermen was bad and tales of fishermen having to throw their catch back into the sea, because they could not sell it, were not unfounded.

From 1932 to 1939 the fishing trade improved slowly but had not risen to the level of the late twenties when the war broke out. Since then increase in value has been considerable. The world shortage of fish caused the Canadian government to attempt control of our market. This ensured the processors of a market and their number increased. Wartime needs and shortages tended to restrict the number fishing. Competition for the catch increased and prices rose while the

^x Canadian Affairs, Vol. 1. No. 19 p. 5.

amount caught remained at about 1,100,000,000 pounds a year. Fishermen received as much as 57 p.c. of the market value at the point of landing.

With the War ended and meat still rationed the demand for fish can be counted on for some time. Yet the future of fishing is somewhat uncertain. It is but a matter of time until the Scandinavian countries will re-establish part, or all of their fishing trade. Whether Canadians can hold their present concentrate and cod liver oil market in the face of this, is not known nor is the degree of future Oriental participation in the fishing industry. Other factors affecting the post-war fishing trade are concerned with home and foreign consumption.

Old methods will probably have to be replaced. Changes which are being introduced at present due to manpower shortages will probably be retained. Modern trawlers will replace old time vessels with their dories and hand lines.

Modernization of equipment and improved storage facilities, refrigeration and transportation, should improve the position of the industry but will require fewer men per ton of fish. In the long run the small entrepreneur will probably be squeezed out either to become an employee or to seek employment elsewhere.

The lobster industry at present faces depleted stocks which are hard to replenish and markets which are hard to regain. Other shellfish will probably increase in importance and the preparation and sale of edible seaweeds as an industry is hardly in its infancy as yet.

II. Hunting, Trapping, Fur Farming

The fur industry in Canada dates back to fur trading of pioneer days when the export value of furs from Canada exceeded that of all other products. Civilization gradually pushed the trade back to the frontier, first in the settlements of Eastern Canada, then, with the opening of the West, to territories not suited for settlement. Still the area comprising northern Quebec, and Ontario, the Northwest Territories and the northern part of the Prairie Provinces, the mountainous area of British Columbia and the Yukon remain one of the best natural reservoirs in the world for fine furs. In these areas fur trade is only rivalled by the extraction of mineral deposits.

The wide variety of fur-bearing animals includes bears, wolves, foxes, weasel, otter, beaver, marten, fisher, mink, rabbit and muskrat. During the twenty years ending 1944 value of the furs remained fairly constant at about \$15,000,000 although the number of better furs decreased and poorer varieties increased. Had Canada depended entirely on the natural supply both number and value would have decreased. However fur farming compensated for any drop in the natural catch and was supplemented by the development of marshlands for fur products through controlling the water supply and establishing beaver and muskrat preserves. These have provided work for hundreds of Canadians and added to national production.

Ontario, Quebec and Alberta lead in fur production. They are followed by Manitoba, Saskatchewan and British Columbia, and finally the Maritimes and the Yukon.

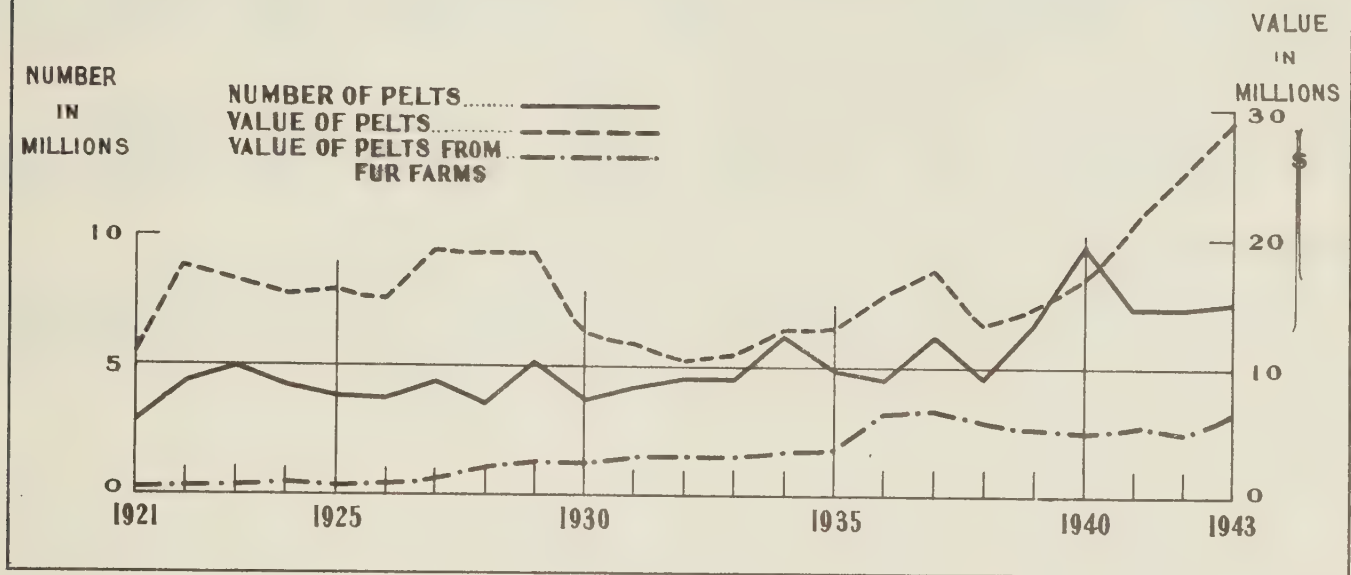
Pelts of mink yielded the greatest total market value, closely followed by muskrat. Next came silver fox and beaver. The total value for 1942-1943 was \$28,505,033 the number of pelts 7,418,971.

Chart 26 graphs the number of pelts, and value of pelts from the fur

Charts 26-27

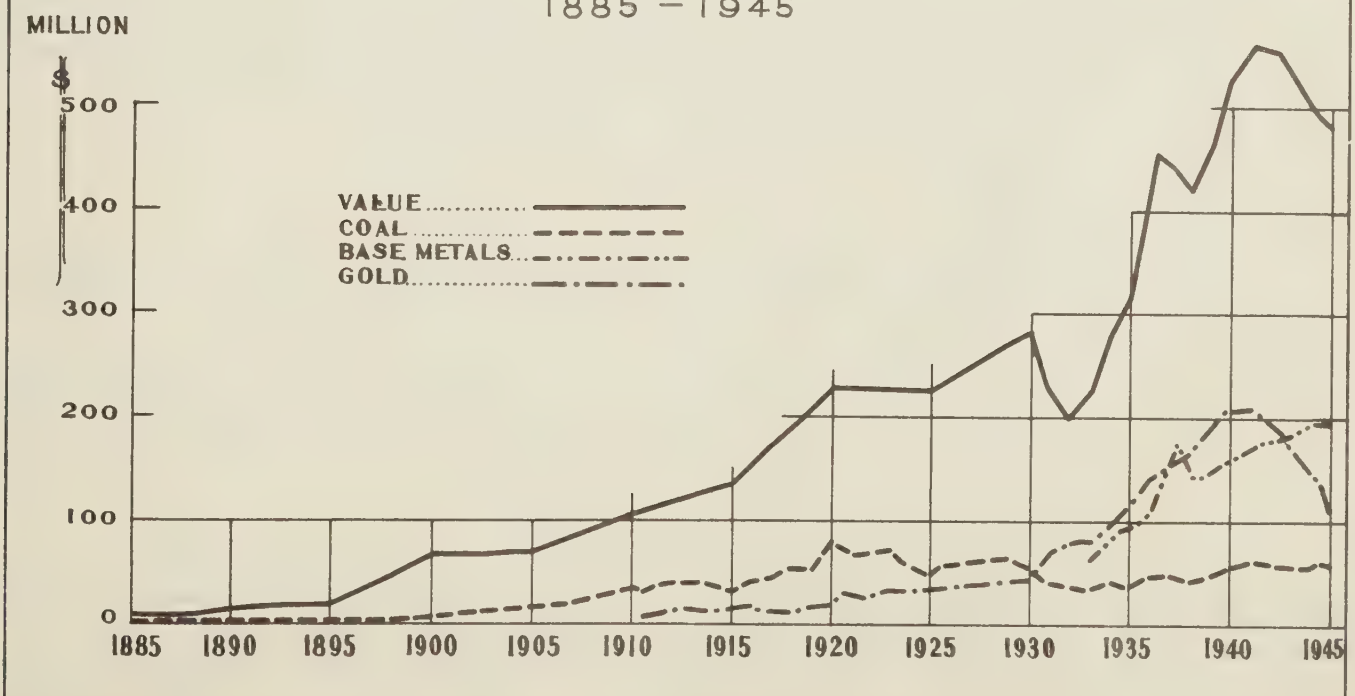
NUMBER AND VALUE OF PELTS IN CANADA

1921 TO 1943



VALUE OF MINERAL PRODUCTION IN CANADA

1885 - 1945



This chart shows that the fur industry can be counted on to produce some \$15,000,000 a year; that the number of pelts from fur farms has been increasing; but varies some from season to season, and is affected by the general economic level of the country. The total number of pelts is fairly constant, fur farming and conservation compensating for any loss in native supply.

Hunters and Trappers:

While hunters and trappers by no means include all of the personnel employed in the fur industry they form an occupational group worthy of consideration. Among the group are a number of Indians. For many it is a full-time job - they depend exclusively on hunting and trapping to gain a livelihood.

According to the census of 1941 there were 17,853 gainfully occupied as hunters, trappers and guides. There were 259 women and 334 men on Active Service.

Age and Marital Status:

The average age of the hunters and trappers was 36. Twenty-five per cent were 25 years of age or under and another 25 p.c., 50 years or older. The majority, 57.53 p.c., were married; 6.46 p.c. were widowed and 1.30 p.c. were divorced. The remaining 34.71 p.c. were single.

Schooling:

The number of years spent in school was not high. Only 0.46 p.c. had spent 13 or more years, 5.91 p.c. from 9-12 years, 24.8 p.c. from 5-8 years and the largest group 68.83 p.c. had spent 4 years or less in school. This is considerably below the average for all occupations.

Economic Status:

Only 38 of these were classed as employers, 15.762 were individual enterprisers, 1,772 were workers and 281 were classed as no-pays.

There is little reason to expect the number employed in the industry to decrease. It is possible that the number of fur farms will increase, probable that more will be employed in controlled areas aiding in replenishing and selecting muskrat and beaver, and possible that the number of wild pelts will not diminish greatly for some years.

Employment and Unemployment:

Of the males classed as hunter, trappers and guides 1,772 were categorized as wage-earners. On the average they reported 27.34 weeks employment in the year preceding the census date 1941.

According to the 1931 Census, 448 of the 1,563 male wage-earners in hunting and trapping were not at work on the census date - 409 had no job.

III. Forestry and Logging

The forests of Canada cover a vast belt from 600 to 1,300 miles in width reaching from the Atlantic to the Pacific and north of the prairie belt. The forest land constitutes 35 p.c. of the total land area of which about 16 p.c. is suitable for agriculture and 7 p.c. is classed as "improved and pasture". There

are more than 130 species of trees, 33 of which are conifers. The conifers, however, comprise three-quarters of the standing timber and 80 p.c. of the wood used.

According to an estimate Canada possesses 388,550 million cubic feet of merchantable timber, two-thirds of which are accessible to commercial operations. Each year natural growth tends to replace what is taken by man, insect and fire. It was further estimated that 3,079,782,000 cubic feet of standing timber were felled in 1943. About one-third was used as pulpwood; slightly more for lumber and slightly less for firewood. Another 51,433,000 cubic feet were destroyed by fire while insects, and three diseases destroyed another 700,000,000 cubic feet. The average yearly cut for the ten years prior to 1941 was 3,161,000,000 board feet. The 1941 record cut was 4,941,000,000.

Replacement requires an average annual growth rate in excess of 14 cubic feet per acre. Whether Canadian forests are becoming depleted is not known but more rigid management would insure future stocks.

In British Columbia the work is fairly well distributed throughout the year but east of the Rockies many extra men are required during the logging season. It is fortunate that this seasonal work comes at a time when many agricultural workers and others experience a slack season.

The industry adds \$200,000,000 or more to the national income in good years - it added half a billion in 1941, a peak year. In 1941 it has been estimated that operations in the woods involved the investment of over \$189,000,000, gave employment of 32,430,000 man days and distributed more than \$105,000,000 in wages.

About 90 p.c. of the forest land is Crown land. Around 174,000 square miles of the Crown land are leased to lumber, pulp and paper companies and others. Some 102,000 square miles of forest are privately owned. About 45 p.c. of this is in the form of farm wood lots.

Personnel in Forestry and Logging:

There were 93,313 males employed in forestry and logging according to the 1941 Census. These were distributed among the provinces as follows:

Prince Edward Island	.....	215
Nova Scotia	.....	6,494
New Brunswick	.....	13,382
Quebec	.....	34,846
Ontario	.....	16,437
Manitoba	.....	1,630
Saskatchewan	.....	1,025
Alberta	.....	1,150
British Columbia	.....	18,134

Those employed in processing the wood and manufacturing it into other commodities are listed elsewhere.

Age:

The average age for all gainfully employed in logging was 35 years. The owners, managers and foremen averaged 46 years, the foresters and timber cruisers 41, and the lumbermen 33. The 75,000 lumbermen formed the largest and youngest group. One-quarter of them were 23 years of age or younger, one-quarter were 44 years or older.

Conjugal Condition of the Same Groups in Percentages:

	Total	Single	Married	Widowed	Divorced, Separated
Owners and managers	100	14.02	81.63	3.44	0.91
Foremen	100	21.27	75.09	2.73	0.91
Foresters and timber cruisers	100	32.61	62.83	3.47	1.09
Lumbermen	100	52.98	43.15	2.72	1.15

Marriage increased with age and with better positions as might be expected although a fair percentage (47 p.c.) of the lumbermen were or had been married.

Years at School for the Same Group in Percentages:

A percentage distribution of the number of years at school for the same groups was as follows:

	Total	1-4	5-8	9-12	13+
Owners and managers	100	25.35	58.32	14.82	1.61
Foremen	100	15.53	49.53	28.82	6.07
Foresters and timber cruisers	100	13.26	25.62	44.90	2.29
Lumbermen	100	30.33	58.62	10.27	0.78

Half of those connected with logging had from 5 to 8 years in school; 23.6 p.c. went to high school; slightly less than 6 p.c. had more advanced work and the remaining one-fifth had less than 5 years. This is below the average for all industries.

Occupational Status:

The majority in this occupational group, 71,225 were classed as workers. An additional 965 were "no-pays". Only 983 were classed as "employers" while 7,075 were "own account". However, it should not be assumed that logging and lumbering as carried on by the 63 largest sawmills which produce about 55 p.c. of the total lumber produced is anything like as simple as that carried on by farmers on their woodlots. The big logging camps and mills require the co-operation of many occupations. Some of the big Pacific coast sawmills, for example, require managerial, professional, and office staff and have about 150 different types of work to be done by the workers. Big logging camps are likewise highly complex. For purposes of the census, however, the workers are grouped into the few categories used in this report.

Loggers and lumbermen in British Columbia work most of the year - about 300 days on the average. But east of the Rockies it is more often but a part-time job. The shortest time is put in by those driving logs who average from 40 to 50 days. Those hauling logs average somewhat better, about 80 days, while those employed in cutting logs are likely to be busy for, from 100 to 130 days a year.

The hours are long (this does not include workers in the paper mills who are included under manufacturing) usually 10 or 12 a day. Wages vary depending on a number of factors such as supply, and demand for the products. The war demand caused the wages to increase some and they would probably have risen considerably higher had there been no controls. Average earnings and average weeks employed for the various groups tabulated, were as follows:

	Average earnings \$	Average weeks employed	Absent June 2, 1944	Total wage-earners
Managers	2,160	45.70	25	431
Foremen	1,007	42.26	92	1,321
Foresters and timber cruisers	779	36.82	126	2,923
Lumbermen	454	30.66	9,931	66,550

In 1943-44 loggers in B. C. received from \$5.00 to \$7.00 a day with board valued at \$1.00 or more extra. In the rest of Canada for the same year those cutting or hauling saw-logs or pulpwood received \$60 to \$75 a month and board. Wages for driving logs were from \$2.75 a day up with board provided. Most of these workers do not come under Unemployment Insurance or get Compensation.

Several Unions are organized among groups of workers. About one-third of those in British Columbia are not only unionized but work under union collective bargaining agreements.

Future of Lumbering in Canada:

School youth considering possibilities in the lumbering industry are more interested in its future than what is current under the influence of war-time demands. To judge by the amount of building necessary in Canada the immediate future of the lumber industry seems well assured. But a long time view must consider the possibilities of exporting such products as: paper and paper pulp, lumber, articles manufactured from wood, etc. At present the demand for construction abroad is strong and can absorb all the lumber, etc. Canada can export for some time. But whether this demand will continue, whether it will be effective in that the other nations can pay for what they want, and whether other nations with wooded areas will increase the competition are questions far more difficult to answer.

Another avenue for expansion has to do with the new uses for wood. Among those which have a fair demand at present are; insulating wallboards, rayon silks, cellophane, plastics for such articles as fountain pens, phonograph records, alcohol, smokeless gunpowder, imitation leather, linoleum and even yeast cakes. Other new substances are on the way to compete with impregnated plywood, etc. While none of these can be expected to compare in sales with woodpulp and paper they may provide an additional source of employment and revenue.

IV. Mining

Mineral production in Canada dates back to the time of earliest settlement. Large scale production, however, is a phenomenon of the twentieth century. In 1885 the value of mineral production was about \$10,000,000. By 1940 it had increased more than fifty-fold.

Mining, on the whole, was affected much less by the depression than most other industries and was in a favourable position to aid the United Nations when war broke out in 1939. With the war over considerable adjustment is inevitable. Home consumption of minerals and mineral products should increase for some time and utilize some of the products which would have been channeled towards war supplies during the war years but export to other countries is necessary if the surplus is to be used. Conversion to war-time uses was probably more extensive in this than any other industry. While this inevitably caused a backlog of home demand for the usual metal products, it is doubtful if the demand could keep the

shops going for long without the help of sales abroad.

Mineral production under the impetus of war demand reached its peak in 1942 with a total value of \$566,800,000. In 1944 Canada was one of the leading exporters of base metals. Some of the factors behind this were as follows: an increase in the aluminum industry until it reached 6 times its pre-war size, with aluminum being prepared from bauxite from South America, cryolite from Greenland, and acid-grade fluor-spar from Newfoundland and the United States. Getting aluminum from bauxite was an accomplishment of Canadian scientists. Discovering new mines and reclaiming old ones also added to the total.

The post-war situation for minerals clearly indicates that Canada must export aluminum and magnesium. She must continue to export nickel and copper and their mixtures, brass and bronze. She has never used more than 5 p.c. of her asbestos production and has a surplus of lead. Production of molybdenum, chrome, tungsten and tin increased during the war years and her steel production increased until Canada at present produces about three-quarters as much as her needs.

Mining Personnel:

The 1941 Census reported 71,861 males (exclusive of those on Active Service) employed in mining operations and quarrying as compared with 28,341 in 1901, an increase of from 1.83 p.c. of the gainfully occupied in 1901 to 2.14 p.c. in 1941. The 71,861 were distributed among the provinces as follows:

Prince Edward Island	5
Nova Scotia	14,300
New Brunswick	1,574
Quebec	9,977
Ontario	24,152
Manitoba	2,275
Saskatchewan	878
British Columbia	10,883

Age and Marital Status:

There is some considerable age range between the averages for the various groups employed in mining. The average age of the owners and managers was highest - 48. Next came the average for labourers in the mines and quarries, 42; the age for foremen, 40; quarriers and rock drillers, 38; and at the lower end miners and millmen, and oil well drillers with an average age of 35.

More than 50 p.c. of all the groups were married but the highest percentages were found among the owners, managers and foremen, and lowest among the labourers as may be observed from the following tabular statement.

Percentage of Gainfully Occupied Mining Personnel Distributed
According to Occupational Status

	Total	Single	Married	Widowed	Divorced
Owners and managers	100	9.6	85.3	3.6	1.5
Foremen	100	14.1	81.9	3.0	1.0
Labourers - mines and quarries	100	42.0	54.6	2.4	1.0
Miners and millmen	100	33.3	62.8	2.4	1.5
Oil well drillers	100	23.9	72.3	1.7	2.1
Quarries and rock drillers ..	100	34.1	60.6	3.8	1.5

Years in School:

Employees in mining show the full range in years of schooling from less than four to more than 13.

Percentage of Mining Personnel according to years at school was as follows:

		Years at school				
		Total	0-4	5-8	9-12	13 +
Owners and managers	100	4.1	29.6	40.1	26.2	
Foremen	100	11.3	49.1	32.9	6.7	
Labourers - mines and quarries	100	18.1	56.0	23.9	2.0	
Miners and millmen	100	18.6	55.7	23.3	2.4	
Oil well drillers	100	18.0	52.4	26.0	3.6	
Quarriers and rock drillers	100	18.3	62.6	17.9	1.2	

The owners and managers have the most years in school on the average and the quarriers and rock drillers least.

Employment and Unemployment:

Some idea of employment among those in the mining industry may be obtained from the number of weeks those in the groups already used were employed during the year preceding the census, 1941. In tabular form they are:

	Number	Earnings \$	Weeks employed	Absent June 2, 1942
Managers	957	3,472	49.31	32
Foremen	2,804	1,771	47.83	129
Labourers - mines	13,801	918	39.51	1,411
Miners - millmen	48,797	1,144	40.79	6,258
Oil well drillers	625	1,394	39.12	75
Quarriers and rock drillers ..	1,393	670	33.02	172

Some idea of weekly wages may be obtained by dividing years' earnings by number of weeks employed.

The year 1941 was a war year with unemployment at a low ebb. In 1931 the situation was as follows:

	Number	Number at work	No job	Temporary lay off	Illness	Accident
<u>Coal Mining</u>						
Managers	241	225	12	3	-	1
Foremen	950	823	31	78	11	5
Haulage workers ..	1,445	872	81	450	30	11
Miners	17,469	8,375	3,102	5,358	425	229
Labourers	6,063	3,521	734	1,618	125	51
Other	1,371	971	44	286	52	18
<u>Other Mining</u>						
Managers	493	465	23	3	2	-
Foremen	1,051	946	66	27	9	3
Haulage workers ..	377	346	23	2	-	6
Millmen	784	707	67	4	6	-
Miners	12,286	8,907	2,825	322	145	77
Oil drillers	518	340	153	17	4	2
Quarriers	1,496	1,127	300	38	18	13
Labourers	8,754	6,628	1,842	143	82	54
Other	2,025	1,607	368	30	12	6

Of the 55,326 wage-earners in mining June 1, 1931, 19,465 were not at work. Of these 9,671 had no job, 8,279 were laid off temporarily, 921 were sick, 471 had suffered an accident and 6 were on strike.

Some 38,756 of the 55,326 mining personnel lost time. The amount of time lost varied from less than a month to practically the whole year. About half of those losing time, lost less than half a year, the remaining half were employed for less than half of the year.

The number of weeks lost, by those who lost time among the mining personnel, in percentages for the year prior to June 1, 1939, were: 1-4 weeks 6.6 p.c., 5-8 weeks 6.5 p.c., 9-12 weeks 7.4 p.c., 13-16 weeks 7.6 p.c., 17-20 weeks 9.2 p.c., 21-24 weeks 7.8 p.c., 25-28 weeks 25.2 p.c., 29-32 weeks 9.2 p.c., 33-40 weeks 10.8 p.c., 41-48 weeks 4.0 p.c., and 49 weeks and over 5.7 p.c.

3. MANUFACTURE

Manufacture in Canada ranges from the production of articles in basement or attic workshop to mass production in large factories and custom production of locomotive or battleship -- from one-man establishments operated in spare time to Leviathan corporations operated continuously.

Pumping oil cans, made in a small shop in a Saskatchewan village are on sale in hardware stores across the Dominion. Hand-made fishing spoons from another Saskatchewan village are the pride of anglers from Atlantic to Pacific. These are but two examples of mechanical devices which have proven somewhat lucrative and efficient and are manufactured in rather unexpected quarters. For it is not on the Prairies where one finds Canada's manufactures but in Quebec and Ontario where 82 p.c. of the industrial capital was employed in 1941. Here too manufacture ranges from the manual weaving of rugs and wood carvings to giant turbines and acres of factories countaining miles of conveyer belts producing thousands of articles in unbelievably short time.

The Maritimes have always done a certain amount of manufacturing. In part this was determined by their location on the sea, in part by the fact that they began manufacturing for their home market before transportation was as efficient as today. Similarly British Columbia being somewhat isolated by mountains began manufacturing early in her history. She found her market somewhat limited but has progressed in ship building, manufacture of articles from wood and the canning of fish, vegetables and fruits.

Manufacture in Canada has had two chief aims. The first is directed towards domestic requirements. Here is found a comparatively small, though slowly expanding market. This expansion should continue so long as the population continues to increase, the level of living continues to rise, transportation is being improved and the range of goods is widened.

The second aim is directed to the expansion of goods processed for export. The processing of native products began in early times with the main raw materials fish, furs and timber. The preparation of farm products began somewhat later but has gradually increased while the building of ships which began in the day of sailing vessels, was rapidly accelerated during the second world war.

A special phase of processing consists in the preparation of marketable goods from imported raw materials not indigenous to Canada. It has always been necessary for Canada to import certain raw materials ranging from coconuts, coffee

beans and rubber from the plantations to fine, woven dressgoods.

While in all such production there is a tendency for manufacture to be further removed from the primary industries; for some time to come the largest manufacturing industries will be based on such natural resources as minerals, forests and fertile lands while cheap waterpower shall continue to be an important factor in keeping costs down whenever Canada must compete in the world market.

Canada received an impetus to increase manufacture during the First World War. Goods were cut off from Europe, costs rose and the Canadian manufacturer tried to meet the demand. Factory methods became more specialized and a high degree of administrative and mechanical efficiency was attained. A number of factors influenced the course of manufacture in the inter-war period. Installment buying probably helped put off the day of settlement but later added to the depth of the depression. Yearly models in wearing apparel and automobiles influenced the market somewhat, while concentration on new and more effective advertising was a potent influence. This may be recognized by a comparison of magazine advertising during the past few decades; the realization that radio advertising is a product of this century and a comparison of newspaper advertisements covering the same period. Competition was keen during this period with the result that efficiency increased and production methods were streamlined.

During the Second World War Canada's manufacturing capacity increased tremendously. Utilizing this diversified expanded development in the production of civilian goods is complicating post-war readjustment in industry and will have repercussions which will be far-reaching in our ways of living and thinking.

Some idea of this expansion in manufacture may be grasped from the realization that the physical volume increased 50 p.c. from 1923 to 1929, and about 35 p.c. of that increase was either absorbed in capital equipment or served to increase the level of living. From 1929 to 1939 the increase was but 8 p.c. while the increase during the next few years, 1939 to 1943, was about 69 p.c. This may be accounted for by war production which absorbed much more than the increase noted. In fact during 1943, the peak year of war production, 64 p.c. of the total productive capacity was used for war purposes.

While volume of production and number of employees are used as indicators of expansion in manufacture neither is particularly satisfactory as they are modified by too many factors. None the less some idea of growth in manufacture in Canada may be obtained from Chart 28, which shows the number of employees in Canada, the Maritimes, Quebec, Ontario, the Prairie Provinces and British Columbia. Had the chart gone back to the time of Confederation it would have shown 188,000 employees in 1870, 255,000 in 1880 and 369,600 in 1890. Increase in manpower from 1870 to 1941 may serve to indicate growth although it neglects technological advance to a great extent. Many new machines were introduced which increased efficiency and reduced manpower. Because of this actual increase in number of men corresponds to an increase several times higher in production.

Each pair of hands is now assisted by a greater number of horsepower in mechanical equipment than ever before. This additional capital equipment cannot be measured accurately by comparing capital investment as this would not take into consideration technological improvements in the machines or other changes in value. Nevertheless capital invested per employee is some measure of the degree of mechanization and increased efficiency in the industry.

In the United States where mechanization has advanced further, on the average, than in Canada The Conference Board^x reported the following:

"The aggregate output of the nation's factories expanded nearly four-fold from the turn of the century to 1939 and as a result of the 'impossible' war demands, production in 1943 marked a level almost nine times greater than in 1899 ... From 1900-1943 the number of workers increased only about 150 p.c. while output gained more than 700 p.c. ... However this measure of labour productivity ... does not take account of the decline in the length of the work week. On a man-hour basis, productivity increased 300 p.c. in the four decades of the twentieth century".

In Canada since 1915 investment has almost tripled and the average investment per wage-earner has increased. Similarly the cost of materials used have more than doubled for each establishment. To offset such increases values, added in manufacture per employee have increased proportionately. This has been possible in part because of an increase of two or three times in the power now employed, in part to more efficient methods.

Hand in hand with these increases went a gradual diminution in the number of hours worked per week, which was, however, upset by the Second World War. In 1932 the work week was 48.9 hours but by 1939 it had dropped to 47.2 hours. Then hours increased to 50.5 but mainly to meet the war needs and this increase was to a great extent attributable to overtime.

Female workers on the average worked 4.4 hours per week less than the males. The number of females involved had been increasing for some time previously but increased very rapidly during the war years. In 1939 there were 281 females to each 1,000 males. By 1941 the proportion had increased to 347 per 1,000.

By October 1, 1944 when about one in four of the female population fourteen years of age and older was either in the Armed Forces or in industry and the number employed in civilian industry had expanded by more than 30 p.c. beyond the 1939 figures, the proportion had increased to somewhere between one-third and one-half.

Some idea of the increase in manufacture during war years may be obtained from a comparison of 1939 and 1942 values in manufactured goods. The increase was from \$1,531,100,000 in 1939 to \$3,310,000,000 in 1942 an increase of 116 p.c. The advance in prices as measured by index numbers could account for only a relatively small part of this; the rise mainly represents an expansion in volume.

The greatest expansion was registered in iron and steel where an increase of 292 p.c. was registered. Chemical products increased by 184 p.c. and non-ferrous metals 128 p.c. These were followed by the miscellaneous group with an increase of 92 p.c., wood and paper products 88 p.c., animal products 65 p.c., non-metallic mineral products 65 p.c., and vegetable products 36 p.c. Control orders, material shortages and war needs had determined the relative increases in the various groups with the result that there is little correspondence between war production and goods required for home consumption. As a result considerable adjustment will be necessary and already considerable retooling and readjustment has taken place. At the peak of production manufacture drew workers from most other industries. Many of these will probably have to return to their former occupations or seek work elsewhere.

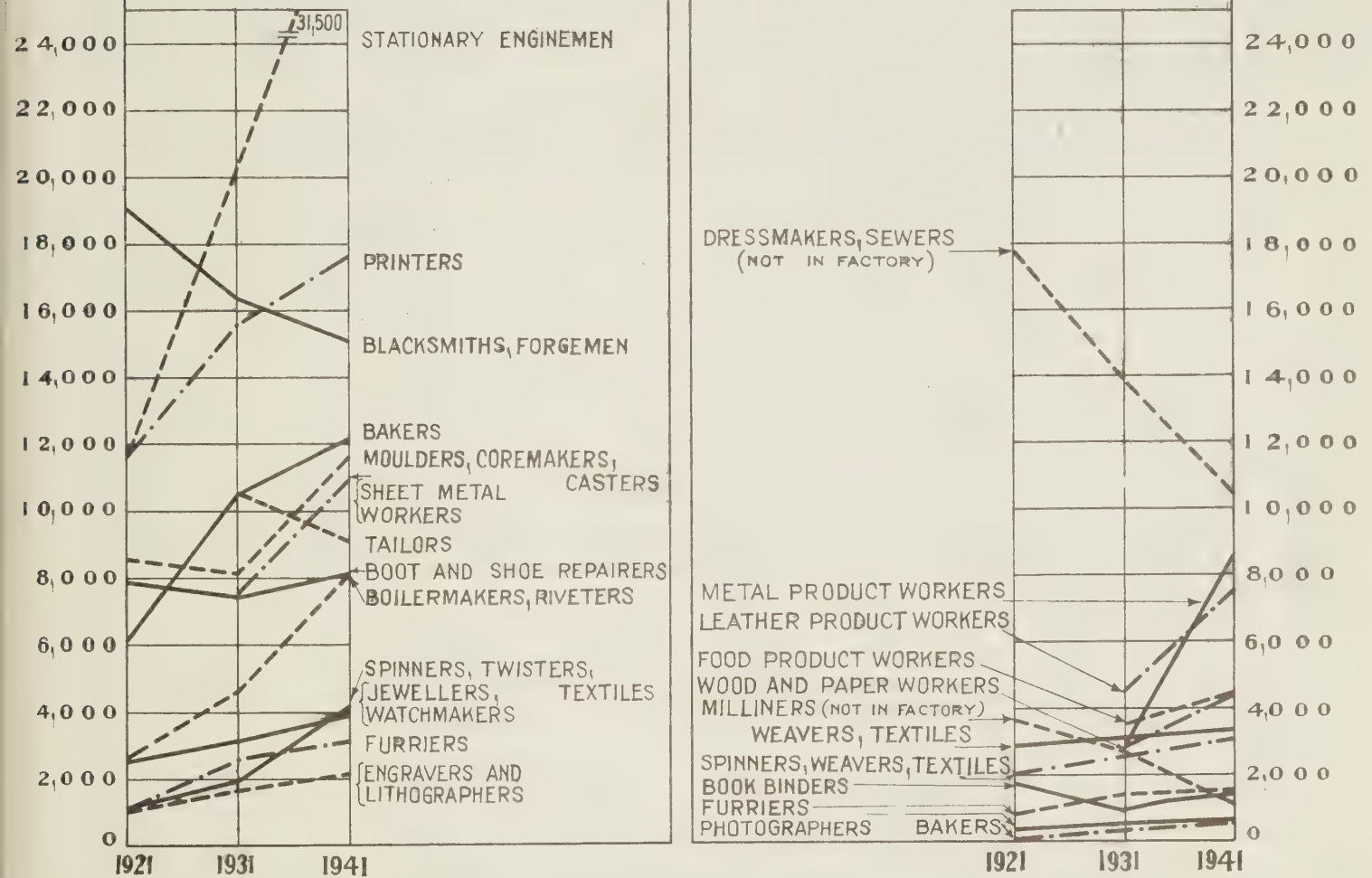
^x The Conference Board Business Record, National Industrial Conference Board, Inc. 247 Park Ave., New York. Vol. 11 No. 2. p. 55 ff.

EMPLOYEES IN MANUFACTURING OCCUPATIONS

1921, 1931, 1941

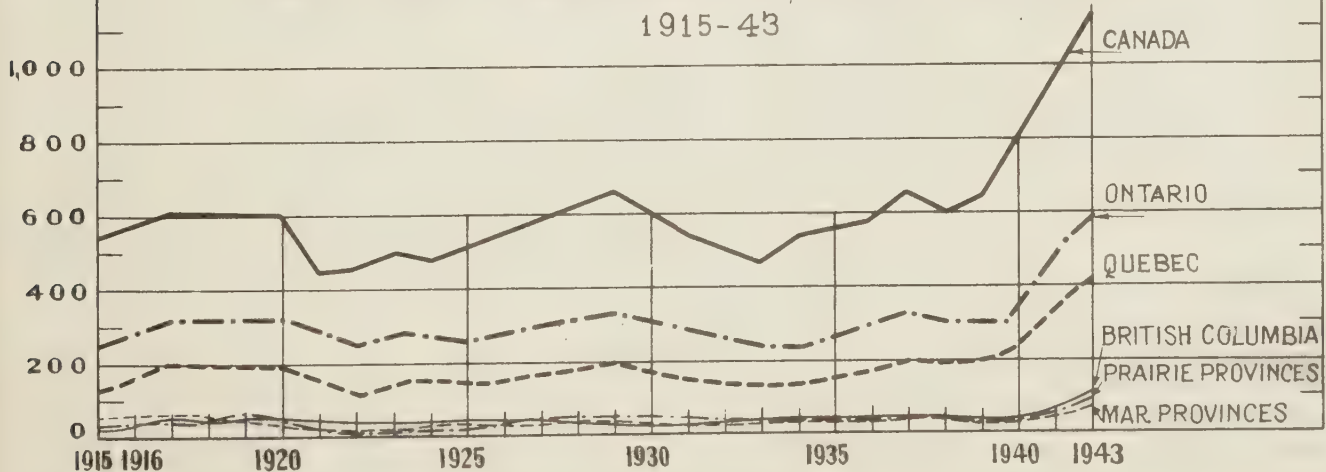
MALE

FEMALE



EMPLOYEES IN MANUFACTURE, CANADA AND REGIONS

1915-43



Hours per Week in Manufacture

While there is some variation from establishment to establishment in hours worked per week there is a tendency for these variations to be limited by competition for workers and consolidation of ideas of a fair day's work. The 48-hour week was generally accepted although there was a tendency towards shortening it before the war broke out in 1939. During the war period, increased hours were accepted by labour and management to increase production. Since the war's conclusion labour has made itself vocal as favouring a shorter work week at the same weekly rate of pay. Table 40 gives figures for weekly hours worked from 1932 to 1943 and hours per week for Canada and the provinces, 1943.

Table 40. Average Hours Worked per Week in Month of Highest Employment, 1932-1943 and Hours Per Week for Provinces and Regions of Canada in Manufacture.

Average Hours per Week					Hours per Week, 1943	
	Male & Female	Male	Female		Male	Female
1932	48.9	-	-	Canada	50.4	44.8
1933	48.7	-	-	P.E.I.	56.0	52.8
1934	49.2	-	-	N. S.	52.4	47.2
1935	48.7	-	-	N. B.	52.4	45.7
1936	48.7	-	-	Que.	52.2	45.9
1937	48.8	-	-	Ont.	49.7	43.9
1938x	46.7	47.3	44.6	Man.	49.3	43.4
1939x	47.2	48.1	45.2	Sask.	51.7	48.2
1941	50.6	51.5	47.6	Alta.	49.4	45.2
1942	50.2	51.3	46.9	B. C.	46.2	43.7
1943	48.8	50.4	44.8	Yukon and N.W.T.	48.5	60.0

x Data for 1938-39 do not include hours worked overtime.

Distribution of Manufacturing Workers by Selected Age Groups

Manufacturing occupations not only employ about one-third of all gainfully employed but provide a greater array of jobs than any other occupational group. Some of these are more suited to youth while others are mainly occupied by older workers. Percentage of youth and older workers in the census classification of workers in manufacture may be seen from Table 41.

Table 41. Percentage of Gainfully Occupied Workers, 14 Years of Age and Over, in Manufacture, by Selected Age Groups, Canada, 1941

Manufacture	M A L E S				F E M A L E S			
	14-19	20-44	45-64	65-70+	14-19	20-44	45-64	65-70+
Manufacturing	7.4	60.9	28.2	3.5	23.0	65.3	10.4	1.3
Owners, managers	0.1	47.3	45.4	7.2	1.7	58.0	35.7	4.6
Foremen (forewomen)	0.4	55.9	39.7	4.0	4.3	76.7	17.9	1.1
Inspectors - chemicals	10.5	61.2	27.6	0.7	25.6	72.9	1.5	-
Inspectors and gaugers - metal.	6.7	64.9	26.5	1.9	25.1	72.6	2.3	-
Inspectors, graders - wood	3.8	60.2	30.4	5.6	22.9	75.0	2.1	-
Bakers	9.5	50.4	26.4	3.7	17.8	67.2	13.2	1.8
Blacksmiths, forgemen	2.3	40.3	46.7	10.7				
Bleachers, dyers - textiles	9.6	65.5	22.0	2.9	32.8	62.6	3.8	0.8
Boiler firemen	2.6	54.2	38.6	4.6				
Boilermakers, plasterers, riveters	11.2	58.3	38.0	2.5	37.0	61.2	1.6	0.2

Table 41. Percentage of Gainfully Occupied Workers, 14 Years of Age and Over, in Manufacture, by Selected Age Groups, Canada, 1941 - con.

Manufacture	M A L E S				F E M A L E S			
	14-19	20-44	45-64	65-70+	14-19	20-44	45-64	65-70+
Bookbinders	5.6	48.1	37.3	9.0	16.1	70.1	12.5	1.3
Boot and shoe repairers	3.6	50.8	36.6	9.0	12.5	50.0	22.9	14.6
Butchers and meat cutters	0.3	66.6	24.8	0.3	31.5	63.0	4.3	3.2
Cabinet and furniture makers ..	7.4	48.2	37.0	7.4				
Coopers	5.2	50.8	34.9	9.1				
Sewers, n.i.f. (Dressmakers) ..	8.1	42.4	41.4	8.1	5.9	50.6	35.2	8.3
Electrical appliance repairmen .	6.7	78.4	13.8	1.1	40.0	58.6	1.4	-
Engravers and lithographers ..	6.7	60.2	28.2	4.9	21.3	77.0	2.7	-
Filers and grinders	7.3	62.6	26.6	3.5	30.5	67.0	2.5	-
Fitters and assemblers - metal .	9.6	69.2	19.6	1.6	33.7	64.4	1.7	0.2
Furnacemen - metal	3.2	75.0	20.7	1.1				
Furriers	9.0	67.0	22.0	2.0	12.3	67.1	18.3	2.3
Heat treaters and annealers ...	5.1	69.2	25.7	1.0				
Jewellers and watchmakers	8.0	53.6	31.7	6.7	34.9	61.5	3.2	0.4
Loom fixers	1.9	70.7	24.1	3.3				
Machinists - metal	9.4	59.1	28.7	2.8				
Mechanics and repairmen n.e.s. .	7.4	70.9	20.5	1.2	30.0	63.8	5.3	0.9
Millers - flour and grain	3.1	54.0	35.1	7.8				
Milliners, n.i.f.	-	68.8	31.2	-	4.8	64.1	27.8	3.3
Millwrights	1.0	49.7	43.9	5.3	35.6	60.2	3.7	0.5
Moulders, coremakers, casters ..	5.0	57.6	34.1	3.3				
Paper makers	1.9	74.9	21.9	1.3				
Patternmakers	7.5	47.4	39.3	5.8	20.0	70.0	10.0	-
Photographers	5.6	57.5	31.6	5.3	13.1	72.3	13.6	1.0
Polishers and buffers - metal ..	10.2	60.6	26.5	2.7	33.8	62.8	3.4	-
Power station operators	1.6	57.9	38.2	2.3				
Printers	7.8	60.5	27.8	3.9	18.0	66.3	15.0	0.7
Rolling mill operators, n.e.s. .	2.8	71.2	25.0	1.0				
Sawyers - wood	7.8	61.4	27.1	3.7				
Sheet metal workers, tinsmiths .	8.9	59.3	28.1	3.7	31.7	65.1	3.2	-
Spinners, twistors - textiles .	18.6	70.9	9.4	0.1	31.4	65.1	3.4	0.1
Stationary enginemen	1.0	51.4	42.3	5.3				
Stone cutters and dressers ...	4.1	46.4	41.5	8.0				
Tailors (Tailoresses)	3.5	39.9	46.3	10.3	11.1	54.9	29.2	4.8
Tool makers, die cutters	12.2	60.5	25.2	2.1				
Upholsterers	8.1	61.2	26.9	3.8	20.3	67.5	11.5	0.7
Weavers - textiles	14.4	72.6	11.5	1.5	25.0	65.8	8.6	0.6
Welders and flame cutters	8.2	78.2	13.2	0.4	31.0	67.0	2.0	-
Wood turners, planers, etc. ..	11.2	59.4	25.1	2.3	29.7	64.3	4.0	2.0
Other occupations in manufacturing								
Chemical products	8.0	70.7	19.9	1.4	27.1	70.0	2.7	0.2
Clothing and textile products ..	14.3	64.9	18.9	1.9	23.3	67.2	8.9	0.6
Food products	9.9	64.0	23.2	2.9	29.7	63.6	6.3	0.4
Leather products	13.1	50.0	25.3	4.7	28.4	64.6	6.7	0.3
Liquors and beverages	9.7	67.9	20.5	1.9	27.6	68.5	3.9	-
Metal products	11.0	65.5	21.9	1.6	33.0	64.8	2.0	0.2
Non-metallic products	10.6	61.6	24.9	3.9	36.3	61.7	2.0	-
Printing and photography	15.7	61.7	20.2	2.6	18.1	71.4	10.0	0.5
Rubber products	9.6	70.4	18.0	2.0	26.2	70.5	3.1	0.2
Tobacco products	5.5	52.1	36.9	5.5	21.7	69.9	8.1	0.3
Wood and paper products	10.0	60.9	25.3	3.8	28.4	65.1	5.7	0.8
Other products	12.8	56.8	25.7	5.7	31.7	62.7	5.1	0.5

Number of Years at School for the Gainfully Employed in Manufacturing

There is some relationship between number of years in school and various occupations in manufacture, although some with few or many years at school are to be found in all walks of life. Percentage of each group having various numbers of years of schooling may be observed from Table 42.

Table 42. Percentage of Workers in Manufacturing, 14 Years of Age and Over, Distributed by Number of Years at School

Manufacture	Years at school							
	M A L E S				F E M A L E S			
	0-4	5-8	9-12	13+	0-4	5-8	9-12	13+
Manufacturing	7.8	50.1	37.5	4.6	4.6	50.4	42.5	2.5
Owners, managers	4.3	31.5	46.7	17.5	3.2	21.8	58.2	16.8
Foremen	5.3	47.5	40.7	6.5	2.9	46.7	46.7	3.7
Inspectors - chemicals	1.6	32.0	51.9	14.5	1.2	48.2	47.3	3.3
Inspectors and gaugers - metal ..	2.1	33.1	51.6	13.2	1.5	32.9	58.9	6.7
Inspectors and graders - wood ..	6.0	46.0	42.5	5.5	-	43.8	52.1	4.1
Bakers	8.1	55.2	34.2	2.5	4.6	45.0	46.6	3.8
Blacksmiths, forgemen	16.1	61.9	20.8	1.2				
Bleachers, dyers - textiles ..	8.1	55.5	32.3	4.1	3.0	51.9	42.8	2.3
Boiler firemen	15.8	59.0	23.5	1.7				
Boilermakers, plasterers, riveters	8.2	52.0	36.7	3.1	0.8	38.8	54.1	6.3
Bookbinders	4.4	48.3	42.7	4.6	1.9	40.6	55.1	2.4
Boot and shoe repairers	22.4	56.9	19.6	1.1	12.5	54.2	29.2	4.1
Butchers and meat cutters	6.8	53.2	37.4	2.6	3.3	50.6	45.0	1.1
Cabinet and furniture makers ..	7.0	54.0	35.5	3.5				
Coopers	18.1	57.5	22.4	2.0				
Sewers, n.i.f. (Dressmakers) ..	7.1	42.4	49.5	1.0	5.7	47.4	42.7	4.2
Electrical appliance repairmen ..	2.3	32.7	56.0	9.0	1.4	37.1	60.0	1.5
Engravers and lithographers ..	1.5	35.8	54.2	8.5	1.4	29.5	59.0	10.1
Filers and grinders	11.0	51.5	34.6	2.9	0.9	44.9	50.0	4.2
Fitters and assemblers - metal ..	4.7	45.3	44.7	5.3	0.8	33.8	61.7	3.7
Furnacemen - metal	15.0	50.8	30.8	3.4				
Furriers	12.6	50.9	33.2	3.3	5.6	52.2	40.2	2.0
Heat treaters and annealers ..	7.7	48.2	38.8	5.3				
Jewellers and watchmakers	4.2	41.6	48.7	5.5	0.8	36.3	58.4	3.5
Loom fixers	9.8	60.9	27.2	2.1				
Machinists - metal	4.1	45.6	45.2	5.1				
Mechanics and repairmen, n.e.s..	6.0	51.1	39.3	3.6	3.4	43.5	49.7	3.4
Millers - flour and grain	7.5	60.7	28.8	3.0				
Milliners, n.i.f.	6.2	56.3	37.5	-	2.5	38.2	54.3	5.0
Millwrights	10.0	57.3	30.0	2.7				
Moulders, coremakers, casters ..	14.0	58.2	26.0	1.8	7.3	52.9	36.7	3.1
Paper makers	8.1	49.1	39.2	3.6				
Patternmakers	2.1	38.5	52.5	6.9	40.0	60.0		
Photographers	2.4	31.7	53.0	12.9	0.8	14.5	68.4	16.3
Polishers and buffers - metal ..	8.1	57.1	32.5	2.3	0.5	41.8	53.9	3.8
Power station operators	4.4	41.0	46.1	8.5				
Printers	1.5	39.1	53.5	5.9	1.6	35.5	58.0	4.9
Rolling mill operators, n.e.s. ..	11.3	46.9	39.0	2.8				
Sawyers - wood	17.6	60.2	21.0	1.2				
Sheet metal workers, tinsmiths ..	5.5	50.9	40.2	3.4	2.7	45.2	50.0	2.1
Spinners, twistors, textiles ..	8.1	65.3	25.3	1.3	5.4	61.7	31.7	1.2
Stationary enginemen	8.2	53.8	34.0	4.0				
Stone cutters and dressers ...	12.0	59.4	26.9	1.7				

Table 42. Percentage of Workers in Manufacturing, 14 Years of Age and Over, Distributed by Number of Years at School - concluded.

Manufacture	Years at school							
	M A L E S				F E M A L E S			
	0-4	5-8	9-12	13+	0-4	5-8	9-12	13+
Tailors	17.9	53.5	26.4	2.2	7.8	48.0	41.8	2.4
Tool makers, die cutters	1.4	31.8	56.6	10.2				
Upholsterers	5.4	52.7	39.1	2.8	2.7	42.6	51.3	3.4
Weavers - textiles	7.4	66.2	25.3	1.1	4.2	62.9	31.5	1.4
Welders and flame cutters	4.5	48.8	42.7	4.0	1.3	30.1	64.8	3.8
Wood turners, planers, etc. ..	8.9	58.9	30.1	2.1	2.0	32.7	62.3	3.0
Other occupations in manufacturing								
Chemical products	6.9	50.3	38.0	4.8	2.6	44.4	49.1	3.9
Clothing and textile products ..	10.9	56.0	30.8	2.3	5.5	54.2	38.7	1.6
Food products	9.1	54.1	33.5	3.3	4.7	48.6	44.9	1.8
Leather products	9.3	61.0	28.1	1.6	4.7	59.5	34.5	1.3
Liquors and beverages	8.5	32.3	34.8	4.4	3.9	44.4	47.0	4.7
Metal products	7.5	49.4	39.3	3.8	1.4	38.3	56.6	3.7
Non-metallic products	9.5	55.0	32.6	2.9	2.1	46.2	48.3	3.4
Printing and photography	2.2	37.8	54.3	5.7	1.1	33.7	61.5	3.7
Rubber products	5.2	53.4	38.4	3.0	4.8	58.1	35.7	1.4
Tobacco products	16.8	60.6	20.4	2.2	11.9	62.2	25.0	0.9
Wood and paper products	10.5	54.0	33.0	2.5	3.4	46.3	48.1	2.2
Other products	5.5	44.7	43.9	5.9	2.6	42.8	51.8	2.8

Wages and Salaries in Manufacture:

In 1942, of the 1,152,091 employees of the 27,862 establishments listed by the Dominion Bureau of Statistics 15.4 p.c. classed as salaried employees received 19.9 p.c. and 84.6 p.c. classed as wage-earners received 30.1 p.c. of the total paid out in salary and wages. The average salary, \$1,890, was 8.2 p.c. above the 1939 figure. The average was \$1,383 or 41.8 p.c. higher than in 1939. Salaries were highest in Ontario, followed closely by Quebec and British Columbia. Wages were highest in British Columbia followed by Ontario, Manitoba, Nova Scotia, Alberta, Quebec, etc.

As manufacture has such a wide variety of different occupations forming the main divisions, several tabular statements are included in the following pages in an attempt to give some idea of possible openings and remuneration which may reasonably be expected from them. Table 43 gives the average annual earnings and average hours worked per week in the forty leading industries. Table 44 gives the average annual earnings and weeks employed for manufacturing occupations (Census 1941). Table 45 gives the number absent, June 1, 1931 according to products manufactured.

Table 43. Annual Earnings in the 40 Leading Manufacturing Industries, 1943

	Annual Earnings	Hours per Week
	\$	
Males		
1. Automobiles	2,371	46.9
2. Miscellaneous iron and steel products	2,173	52.1
3. Scientific and professional equipment	2,124	51.0
4. Bridges and structural steel	2,071	51.5
5. Shipbuilding and repairs	2,051	50.2

Table 43. Annual Earnings in the 40 Leading Manufacturing Industries, 1943 - Con.

	Annual Earnings \$	Hours per Week
Males		
6. Automobile supplies	2,000	51.2
7. Petroleum products	1,971	45.4
8. Aircraft	1,967	53.2
9. Railway rolling-stock	1,941	47.4
10. Brass and copper products	1,929	50.7
11. Rubber goods including rubber footwear	1,919	48.4
12. Primary iron and steel	1,913	50.8
13. Machinery	1,890	53.9
14. Miscellaneous chemical products	1,828	49.8
15. Electrical apparatus and supplies	1,822	51.3
16. Pulp and paper	1,814	52.0
17. Hardware and tools	1,803	53.3
18. Acids, alkalies and salts	1,801	49.7
19. Agricultural implements	1,796	49.2
20. Castings, iron	1,795	51.8
21. Non-ferrous metal smelting and refining	1,778	48.0
22. Clothing, women's factory	1,773	42.5
23. Printing and publishing	1,763	43.6
24. Machine shops	1,714	51.0
25. Sheet metal products	1,658	50.2
26. Slaughtering and meat packing	1,596	50.5
27. Clothing, men's factory	1,568	44.0
28. Printing and bookbinding	1,568	45.3
29. Heating and cooking apparatus	1,538	50.3
30. Bread and other bakery products	1,390	51.9
31. Silk and artificial silk	1,374	50.4
32. Flour and feed mills	1,371	51.9
33. Hosiery and knitted goods	1,328	50.3
34. Cotton yarn and cloth	1,319	50.5
35. Furniture	1,280	48.4
36. Planing mills, sash and door factories	1,233	50.6
37. Boots and shoes, leather	1,222	47.9
38. Sawmills	1,162	54.3
39. Boxes, wooden	1,139	49.3
40. Fruit and vegetable preparations	1,113	49.2
Average, Forty Leading Industries	1,784	50.7
Average, All Industries	1,726	50.4
Females		
1. Shipbuilding and repairs	1,598	44.8
2. Aircraft	1,587	49.0
3. Miscellaneous iron and steel products	1,460	47.3
4. Scientific and professional equipment	1,330	46.5
5. Brass and copper products	1,318	47.5
6. Agricultural implements	1,281	47.7
7. Automobile supplies	1,230	45.8
8. Machinery	1,132	47.7
9. Electrical apparatus and supplies	1,089	47.0
10. Rubber goods including rubber footwear	1,081	42.8
11. Hardware and tools	1,080	47.1
12. Slaughtering and meat packing	1,071	45.2
13. Miscellaneous chemical products	1,069	47.1

Table 43. Annual Earnings in the 40 Leading Manufacturing Industries, 1943 - Con.

	Annual Earnings \$	Hours per Week
Females - concluded		
14. Sheet metal products	1,026	44.5
15. Fur goods	979	44.3
16. Glass products	929	44.2
17. Furniture	902	43.7
18. Woollen cloth	898	47.3
19. Cotton yarn and cloth	897	48.4
20. Narrow fabrics, laces, etc.	864	44.4
21. Clothing, women's factory	863	41.7
22. Hats and caps	852	41.5
23. Medicinal and pharmaceutical preparations ...	852	41.0
24. Clothing, men's factory	840	43.6
25. Tobacco, cigars and cigarettes	807	41.8
26. Woollen yarns	803	45.1
27. Silk and artificial silk	794	45.8
28. Miscellaneous paper products	785	42.9
29. Hosiery and knitted goods	764	45.0
30. Boxes and bags, paper	752	42.8
31. Miscellaneous leather goods	723	42.5
32. Boots and shoes, leather	719	45.3
33. Gloves and mittens, leather	718	44.0
34. Printing and bookbinding	715	41.3
35. Fruit and vegetable preparations	710	43.6
36. Printing and publishing	711	40.8
37. Miscellaneous food products	700	42.5
38. Biscuits, confectionery, cocoa, etc.	690	41.0
39. Bread and other bakery products	687	43.6
40. Corsets	681	44.9
Average, Forty Leading Industries	993	45.1
Average, All Industries	987	44.8

Table 44. Manufacture Personnel, 14 Years of Age and Over, Showing Average Earnings and Average Weeks Employed for Year Ending June 1, 1941, and Number Absent on that Day.

	M A L E S			F E M A L E S			Number Absent from Work
	Total Wage- Earn- ers	Aver- age Earn- ings	Aver- age Em- ployed	Total Wage- Earn- ers	Aver- age Earn- ings	Aver- age Em- ployed	
	\$			\$			
Managers	15,929	3,216	51.02	479	1,406	48.64	192
Foremen	19,667	1,675	49.71	2,058	795	47.78	407
Inspectors - chemical	428	1,220	44.82	332	460	35.93	16
Inspectors - metal	8,456	1,266	44.65	3,942	494	36.02	336
Inspectors - wood	3,780	963	41.53	48	488	38.83	344
Bakers	9,511	822	43.49	627	456	40.38	711
Blacksmiths, forgemen	8,180	1,000	42.04				685
Bleachers, dyers, textiles	1,629	941	44.85	131	460	40.01	55
Boiler firemen	8,145	948	43.46	379	460	28.56	511
Boilermakers, platers	7,965	1,065	40.90				446

Table 44. Manufacture Personnel, 14 Years and Age and Over, Showing Average Earnings and Average Weeks Employed for Year Ending June 1, 1941, and Number Absent on that Day - con.

	M A L E S			F E M A L E S			Number Absent from Work
	Total Wage- Earn- ers	Aver- age Earn- ings	Aver- age Weeks Em- ployed	Total Wage- Earn- ers	Aver- age Earn- ings	Aver- age Weeks Em- ployed	
		\$			\$		
Bookbinders	800	1,193	43.95	1,370	518	39.79	156
Boot and shoe repairers	2,123	591	39.07	20	444	38.56	270
Butchers and meat cutters	12,647	896	44.44	91	479	35.56	896
Cabinet and furniture makers	3,593	903	43.38				229
Coopers	1,026	791	41.65				87
Sewers, n.i.f.	74	926	44.11	3,714	452	40.57	238
Electrical repairmen	2,384	991	43.94	70	420	32.79	140
Engravers, lithographers	1,833	1,659	46.89	60	533	38.93	121
Filers and grinders	4,538	1,099	42.24	118	461	32.95	243
Fitters and assemblers - metal ..	10,778	1,061	41.54	900	499	36.32	421
Furnacemen - metal	5,775	1,315	45.71				217
Furriers	2,789	959	40.24	1,408	531	36.19	365
Heat treaters and annealers	506	1,213	45.21				18
Jewellers and watchmakers	2,640	1,090	45.25	495	508	39.71	152
Loom fixers	705	1,196	48.80				13
Machinists - metal	42,322	1,165	43.95				1,716
Mechanics and repairmen, n.e.s. ..	59,520	966	42.37	198	535	37.22	3,130
Millers - flour and grain	1,486	933	46.44				79
Milliners, n.i.f.	14	1,170	44.60	888	542	38.02	106
Millwrights	4,735	1,278	44.95				244
Moulders, coremakers, casters ...	10,921	1,084	43.63	191	537	36.96	615
Paper makers	3,393	1,655	46.81				199
Patternmakers	1,665	1,389	46.83	10	820	42.10	48
Photographers	1,267	1,099	44.93	467	574	39.67	99
Polishers and buffers	3,092	948	41.98	209	445	33.48	153
Power station operators	2,328	1,518	49.63				47
Printers	14,855	1,269	45.77				814
Rolling mill operators, n.e.s. ..	900	1,614	47.85				39
Sawyers - wood	7,458	734	38.56				441
Sheet metal workers	8,929	1,002	41.54	436	488	37.13	559
Spinners, twistors	3,690	806	44.25	3,243	547	41.76	300
Stationary enginemen	29,755	1,244	44.78				
Stone cutters and dressers	1,634	667	31.80				291
Tailors	6,336	885	39.97	1,187	524	38.23	799
Tool makers, die cutters	6,990	1,485	45.94				194
Upholsterers	2,937	981	42.59	144	532	38.94	162
Weavers - textiles	6,112	777	44.61	3,301	583	42.73	461
Welders, flame cutters	11,607	1,126	42.42	239	524	35.34	580
Wood turners, planers	3,283	835	42.95	101	453	37.63	172
Chemical products	8,157	1,094	44.98	1,132	490	39.06	262
Clothing and textiles	25,482	854	41.80	57,144	471	39.09	4,709
Food products	11,897	775	40.78	4,477	396	34.23	1,450
Leather products	13,776	719	40.06	7,756	401	37.14	1,465
Liquors and beverages	2,635	942	44.01	229	454	35.78	135
Metal products	48,765	1,041	42.90	8,409	510	37.03	2,183
Non-metallic products	4,644	923	42.83	892	453	36.70	281

Table 44. Manufacture Personnel, 14 Years of Age and Over, Showing Average Earnings and Average Weeks Employed for Year Ending June 1, 1941, and Number Absent on that Day - concluded

	M A L E S			F E M A L E S			Number Absent from Work
	Total Wage- Earn- ers	Aver- age Earn- ings	Aver- age Em- ployed	Total Wage- Earn- ers	Aver- age Earn- ings	Aver- age Em- ployed	
		\$			\$		
Printing and photographing	757	1,007	44.83	916	479	39.50	76
Rubber products	6,686	1,006	45.09	2,452	508	40.47	393
Tobacco products	1,028	713	41.57	2,654	479	42.44	275
Wood and paper products	18,100	940	43.62	4,287	465	39.03	1,100
Other products	4,061	884	43.31	2,708	449	37.64	405

Table 45. Wage-earners in Manufacture, 10 Years of Age and Over, Showing the Number Not at Work, June 1, 1931, Canada

	Number		Absent	
	Male	Female	Male	Female
Vegetable products	24,595	6,553	3,572	923
Animal products	33,247	7,729	5,450	1,492
Textile products	31,287	49,329	6,275	6,718
Wood and paper products ..	56,967	6,404	9,424	821
Metal products	147,680	3,647	29,942	482
Non-metallic mineral products	7,973	311	1,213	47
Chemical and allied products	3,888	441	308	34
Miscellaneous	3,495	954	521	110
Electric light and power ..	32,410	3	5,442	-

Weekly Earnings of Male Wage-earners:

Average weekly earnings of male wage-earners employed in the manufacturing industries of Canada as a whole amounted to \$33.80 in 1943, an increase of \$11.57 or 52.1 p.c. over 1939, the year preceding the war. Average hourly earnings also advanced from 46.2 cents in 1939 to 57.1 cents in 1943, an increase of 45.3 p.c. Male wage-earners in British Columbia received the highest average earnings of \$30.57. Ontario came second with \$34.99, followed by Quebec with \$32.49, Nova Scotia \$32.22, Manitoba \$30.86, Alberta \$29.49, Saskatchewan \$29.34, New Brunswick \$26.69, and Prince Edward Island \$26.44.

By comparing weekly earnings in the major industrial groups, it was found that the iron and steel group reported the highest earnings of \$38.92, being followed by the other groups in the order names: non-metallic mineral products \$32.75, animal products \$28.58, textiles and textile products \$28.14, wood and paper products \$27.86 and vegetable products \$27.81.

Average weekly earnings in 1943 in the forty industries employing the greatest number of male wage-earners ranged from \$46.18 for the automobile to \$22.37 for fruit and vegetable preparations. In only five industries were weekly earnings above \$40.00. These industries in the descending order of their rank were: automobile \$46.18, scientific and professional equipment \$43.88, miscellaneous iron

and steel products \$41.40, shipbuilding and repairs \$40.55, and automobile supplies \$40.14. In fifteen other industries earnings ranged between \$35 and \$40 per week; in nine others they ranged between \$30 and \$35; while in the remaining eleven they were below \$30.

Weekly Earnings of Female Wage-earners:

Female wage-earners received on an average \$19.33 per week in 1943, an increase of \$6.55 over wages in 1939. Workers in British Columbia with \$24.46 per week were paid the highest wages. Saskatchewan with \$20.19 ranked second, followed by Ontario with \$20.13, Alberta \$18.30, Quebec \$18.09, Nova Scotia \$17.51, Manitoba \$16.48, New Brunswick \$14.04, and Prince Edward Island \$12.25.

Female wage-earners in the iron and its products group received the highest wages of \$26.98 per week, while in the vegetable products group they received the lowest wage of \$15.16. Female workers in the textile and textile products group normally receive weekly earnings higher than the average for manufacturing in general. Weekly earnings of workers employed in the iron, non-ferrous metal and miscellaneous groups were above the average, but below for those employed in the other groups.

Average weekly earnings of female wage-earners have a narrower range than those of male workers. Weekly earnings in the forty industries employing the greatest number of female wage-earners in 1943 ranged from \$32.04 for aircraft to \$13.14 for biscuits, confectionery, cocoa and chocolates. In only six industries were weekly earnings above \$25. These were: aircraft \$32.04, shipbuilding and repairs \$31.59, miscellaneous iron and steel products \$27.83, scientific and professional equipment \$27.47, brass and copper products \$26.34, and agricultural implements \$26.06. In seven other industries weekly earnings ranged between \$20 and \$25, in the next seventeen they were between \$15 and \$20, while in the remaining ten they were below \$15.

Power:

The generation of water power is the mainspring of Canada's industrial success. This was particularly true in the production of such materials as aluminum, copper, steel, zinc, nickel, lead and chemicals and their conversion to implements of war. Canada is particularly fortunate in having the largest fresh water area of any country, much of it considerably above sea-level. More than half of this is found in Quebec and Ontario territories which compensates for the lack of commercial fuel.

Table 46 gives the available and developed water power in Canada as of December 31, 1943. The estimate of available power is conservative in that it is based on rapids, falls and power sites in which the head has been measured or carefully estimated. Dams, unrecorded rapids and falls may swell the total. The statement indicates that about 20 per cent of the present recorded water power resources are now harnessed and would permit of turbines generating more than 51,000,000 horse-power.

Until 1943 the pulp and paper industry was the largest consumer of electricity. At that time a substitution of coal for electricity left it second to aluminum as a consumer. The consumption of electricity for the production of aluminum increased by 3.5 times during the war years while that for iron increased by 9 times.

Table 46. Available and Developed Water Power in Canada, December 31, 1943.^x

Territory	Available 24 hours power at 80 p.c. efficiency		Turbine Installation
	At ordinary minimum flow	At ordinary six months' flow	Dec. 31, 1943
	h.p.	h.p.	
Prince Edward Island .	3,000	5,300	2,617
Nova Scotia	20,800	128,300	133,384
New Brunswick	68,600	169,000	133,347
Quebec	8,459,000	13,064,000	5,673,443
Ontario	5,330,000	6,940,000	2,673,443
Manitoba	3,309,000	5,344,500	422,825
Saskatchewan	542,000	1,082,000	90,835
Alberta	390,000	1,049,500	94,997
British Columbia ...	7,023,000	10,998,000	769,024
Yukon and N.W.T. ...	294,000	731,000	19,719

^x 1944 Canada Year Book pp. 353-364 - Canada's water-power resources.

During the war years hydro-electric installations rose from 8,289,212 in 1939 to 10,283,763 in 1944, an increase of 25 p.c. In a somewhat lesser degree coal, oil and gas contributed to the generation of power. Considerable quantities of coal are imported into Canada - 28.9 short tons as compared with 17.1 million mined at home in 1944. Similarly 87 p.c. of the crude oil supply of 54,700,000 barrels was obtained from the United States, Columbia, Venezuela and Ecuador. About 45,957 million cubic feet of natural gas were obtained in Canada and supplemented by one and a half times as much manufactured gas.

The personnel of electric light and power were not listed in a separate category in 1941 Census data. In 1931 volumes they represented slightly less than 0.5 p.c. or some 32,500 gainfully occupied.

4. CONSTRUCTION

Construction is particularly sensitive to economic influences, many of which are really psychological in origin. During boom times factories and houses are erected and public works constructed; during times of recession there is general retrenchment.

Most villages, towns and cities have grown haphazardly without much planning and most of them at some time or other have experienced a building boom with sections subdivided considerably beyond the town limits, a few decrepit foundations and a few scattered dwellings on the outskirts to commemorate the unjustified upturn. In other ways too towns and villages have had their ups and downs. When cars and trucks replaced horses there was little demand for services formerly furnished by many villages and towns, and they shrunk while other towns and cities absorbed the extra business. Industries too have flourished, shrunk and disappeared, leaving ghost towns or desolate sections. Within the cities prospering families have kept moving away from the central industrial core to form newer residential sections as the city expanded. The "best" residential sections kept ahead of shops of offices, while boarding and rooming housekeepers took possession of the old properties. Little shops were torn down and replaced by larger many-storied buildings which could afford to pay more taxes. Such was the growth of many a city.

Such growth is, however, spasmodic and somewhat haphazard. Such a lack of organization and long-time planning has resulted in construction being one of the worst offenders among industries causing unemployment, aggravating depressions or encouraging wanton spending. The workers themselves in some of the trade groups, carpenters, masons, etc. have formed unions in an attempt to stabilize wages at a high level. Their efforts have met with some success in maintaining wage levels but have failed to control employment.

Behind much of the public and private building has been the conviction that Canada was a young, vigorous nation which would grow to use many large-scale items which could not pay their way at first. Canadian railways, for example, were built with such long-time view.

During the long depression of the thirties construction was harder hit than most industries. Few new houses were erected and those already constructed were not kept in a state of repair. Families moved off farms and crowded into rooms in cities, while other families in the cities doubled up in smaller quarters. In 1933, despite a larger population, construction dropped lower than at any point recorded since 1910. Chart 30 which graphs the values of construction contracts awarded in Canada from 1911 to 1943 clearly illustrates this. By considering this with the information obtainable from Chart 31 it will be seen that wholesale prices and wages were comparatively low at the same time and employment at an exceptionally low ebb.

From 1934 on the Federal government decided to encourage private building. To effect this the National Housing Act was passed, under which the government guaranteed the risk of such lending institutions as insurance companies which would loan monies to householders at a specific rate of interest for periods of from ten to thirty years. Further provision was made under the Home Improvement Plan to encourage owners who needed help in financing improvements on their properties. These loans were continued until the war began and construction was directed to meet war needs. Limitations were then placed on construction under the N.H.A. although loans were recommended where construction appeared necessary. By 1945 it was felt that more attention could be directed towards necessary civilian construction needs. The N.H.A. was altered to allow for larger loans, lower interest and longer periods to encourage those who were in a somewhat lower income bracket than those who had taken advantage of the building loans before 1945. War time restrictions on materials, etc., have been lifted as soon as it was felt that they were no longer necessary.

War Purposes

Construction for war purposes consisted mainly in defense projects for the Air Force, Army and Navy. The Air Force required, in particular, air fields and buildings for the Commonwealth Air Training Plan; the Army, camps and administrative buildings; the Navy, in common with the Merchant Marine, needed shipyards to turn out more and more ships. Other factories had to be provided to turn out equipment needed by all three as well as other materials for Lend-Lease.

The peak was reached in 1941. Limits were set by limitations in labour and raw materials. The contracts for the most part were handled by the Construction Branch of Munitions and Supply and the Department of Transport of the Department of National Defence. Wartime Housing Limited looked after the contracts for housing employees in war plants. Total government expenditure for 1942 was \$260,000,000 for war construction. This was an increase of \$71,000,000 over 1941. In August, 1942 there were 94,000 workers employed in on-site construction while the number employed elsewhere to provide necessary materials was placed at 100,000.

None of these data include some of the largest war jobs such as the naval and airport projects in Newfoundland and Labrador, the Alaska Highway and the Canol Oil Project in the Yukon and Northwest Territories.

No one is any too sure about the post-war prospects for construction. Surveys have shown that there are thousands of obsolete dwellings in use and crowded to capacity, hundreds of them beyond hope of repair. Thousands of others are not modernized and are badly in need of repair, while congested conditions and housing shortages are common to most of the Canadian cities. Again, there was considerable expansion in factory and workshop during wartime, much of which can be adapted to meet civilian construction needs without too much difficulty. On the positive side also are the accumulated savings in bonds which could be made available for construction as well as the purchase of manufactured goods.

The Federal government has planned to remove building restrictions and encourage private enterprise. Indications are that loans will be encouraged and a price ceiling will be maintained for some time. Both are necessary to ensure employment and prevent prices from skyrocketing. While there are few critics of this policy there are those who feel sure that this programme is inadequate. They suggest that the government must engineer enough construction projects, etc., to ensure a high rate of employment permanently. Otherwise, they contend, there will be the same series of inflation and depression periods as experienced in pre-war years. Planning, they contend, is the only solution and those plans call for government participation in industry.

There is also difference of opinion among authorities as to the practicality of pre-fabricated houses and the role they should play in post-war construction. Among those planned are some of unit construction which can be altered or demounted handily. Some stress the use of plywood or metal while others using standard materials are ready-cut but must be assembled. Those who favour pre-fabricated types feel that they have possibilities in giving cheaper, better and more modern construction and point to the modern automobile which could not be constructed on the spot. Those opposed state that the cost of storage plus transportation charges make such construction impractical except for limited districts.

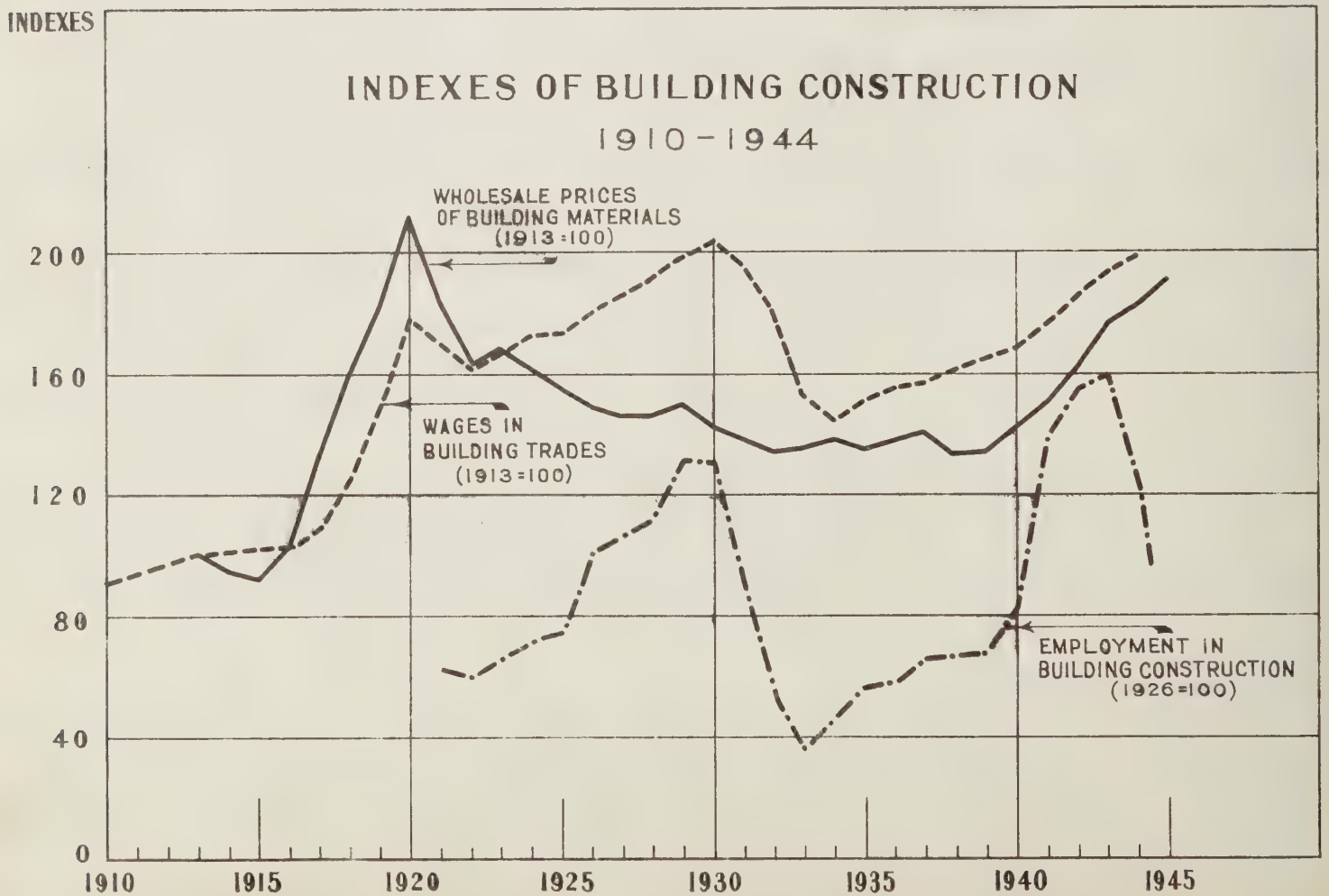
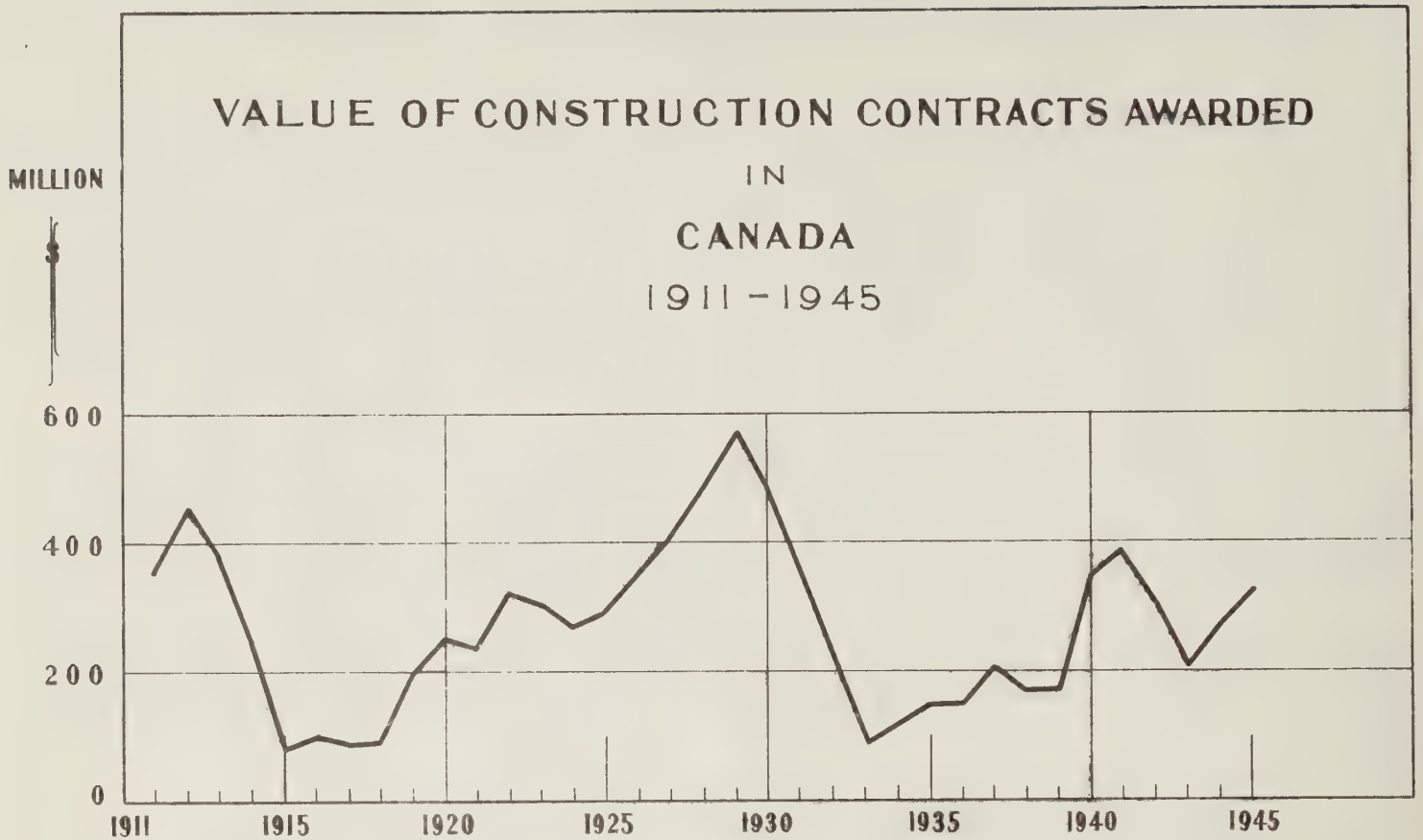
Similarly controversy is rampant as to the number, use and cost of new materials of construction. Undoubtedly the answer lies somewhere between the extreme views. New materials will be introduced and popularized just as new construction is adopted to utilize insulation, prevent vaporization and control heat and humidity. While glass, tile, wallboards of various kinds, cinder or cement blocks, metal products, ready roofing and various prepared shingles will be used more extensively, concrete, brick, plaster and lumber will probably continue to be the most common materials used.

A more pertinent problem concerns the number of skilled workers available to handle the construction. There has been a tendency recently for unskilled labour to masquerade as skilled labour. This has increased the cost of construction and such practice in the long run hurts the trade.

Construction in 1944

The annual report of the Construction Branch of the Bureau of Statistics, 1944, shows a decrease of 21.4 p.c. from 1943 in total value of construction. This reflects a considerable drop in the construction of industrial building from \$140,396,554 to \$71,131,759 and in armouries, barracks and hangars from \$58,216,173 to \$15,001,136. Counteracting this drop somewhat was an advance in residential building from \$63,684,367 to \$83,927,360, institutional from \$13,148,233 to

Charts 30-31



\$21,005,720 and commercial from \$26,429,661 to \$29,233,965. An interesting feature was a decided increase in the number of owner-builders which part was due to a shortage of contractors and in part reflected small private speculation.

Value of materials used showed a drop from 1943 to 1944. Ontario and Quebec dominated the construction scene in 1944 with about 2/3 of the work performed, the employment given and salaries and wages paid.

By 1945 the picture had changed somewhat. With the end of the war many firms began plans for reconversion but there was comparatively little building due to lack of materials and personnel. The housing situation was somewhat similar. Shortages were the chief factor in restricting the number of dwellings erected.

Personnel in Construction:

The number of salaried and wage-earning employees in construction diminished considerably during the war period despite the greater need for construction. Salaried employees dropped from 26,809 in 1939 to 26,769 in 1944 while wage-earning employees dropped from 121,605 to 97,125 for the same period. The number of these fluctuated considerably during the year with the greatest number, 122,606 in August and the least 72,321 in February.

In 1945 with the close of the war the demand for more construction workers became strong and insistent.

Some idea of the distribution of construction workers in 1941 may be obtained from Table 47 and of the number losing time during the year ending June, 1941 may be observed from Table 48.

Table 47. Male and Female Wage-earners in Construction June 1, 1941
Distributed According to Average Earnings and Average Weeks Employed.

Construction Employees	M A L E			F E M A L E		
	Total Wage-earners	Average Earnings	Average Weeks Employed	Total Wage-earners	Average Earnings	Average Weeks Employed
Managers	1,430	2,276	46.70	18	1,382	49.41
Foremen	4,032	1,309	41.23			
Inspectors	449	1,480	45.26			
Brick and stone masons.	7,449	786	30.76			
Carpenters	77,053	810	35.00			
Electricians	19,999	1,240	44.55			
Painters, decorators ..	29,498	754	34.63	261	469	34.42
Plasterers, lathers ..	3,438	690	29.13			
Plumbers	15,985	1,043	41.30			
Structural iron workers	2,161	1,038	37.60			
Other construction occupations	3,717	788	34.79	20	635	34.05

Table 48. Wage-earners in Construction Showing the Number Losing Time and Weeks Lost During the Year Ending June 1, 1931.^x

Construction Employees	Male Em- ployees	Number Losing Time	Weeks Lost	Average Weeks Lost
Managers	1,416	216	5,117	3.62
Foremen and overseers	5,380	2,139	39,633	7.37
Brick and stone masons	9,651	7,730	214,103	22.18
Brick and stone apprentices	380	248	6,582	17.32
Carpenters	68,424	47,485	1,165,804	17.03
Carpenters' apprentices	1,281	678	16,400	12.80
Cement finishers	795	645	16,546	20.81
Electricians and wiremen	18,524	7,519	152,803	8.25
Electricians and wiremen apprentices	1,264	586	13,414	10.61
Painters, decorators, glaziers ..	25,797	17,743	433,577	16.81
Painters' apprentices	997	539	14,114	14.15
Plasterers and lathers	4,964	4,128	114,537	23.07
Plasterers' apprentices	240	144	3,490	14.54
Plumbers, steam fitters, gas fitters	13,233	7,715	170,897	12.91
Plumbers, steam fitter, gas fitters' apprentices	1,779	840	19,409	10.91
Roofers and slaters	643	477	12,308	19.14
Sheet metal and tinsmiths	5,585	3,395	73,947	13.24
Sheet metal and tinsmiths' apprentices	568	287	6,803	11.97
Structural iron works	2,001	1,514	36,925	19.95
Other	892	526	11,922	13.36

^x Only 90 female wage-earners were recorded; 87 of whom were in sheet metal work and 3 managers. Fifty-five lost time amounting to 1,018 weeks.

Trend in Number of Construction Employees, 1921-1941

Male construction workers showed an increase in number for the three last census years considerably greater than the increase in the number gainfully employed. Carpenters, who form the largest single group classified under construction, increased from 12,757 to 24,050, (those on "own account" estimated). Electricians and wiremen almost doubled in number as did plumbers and pipe fitters, while structural iron workers increased more in population than any other group. Plasterers and lathers increased some as did painters, decorators and glaziers. As opposed to this, brick and stone masons increased some from 1921 to 1931 but lost more in number by 1941 than they had gained the first decade.

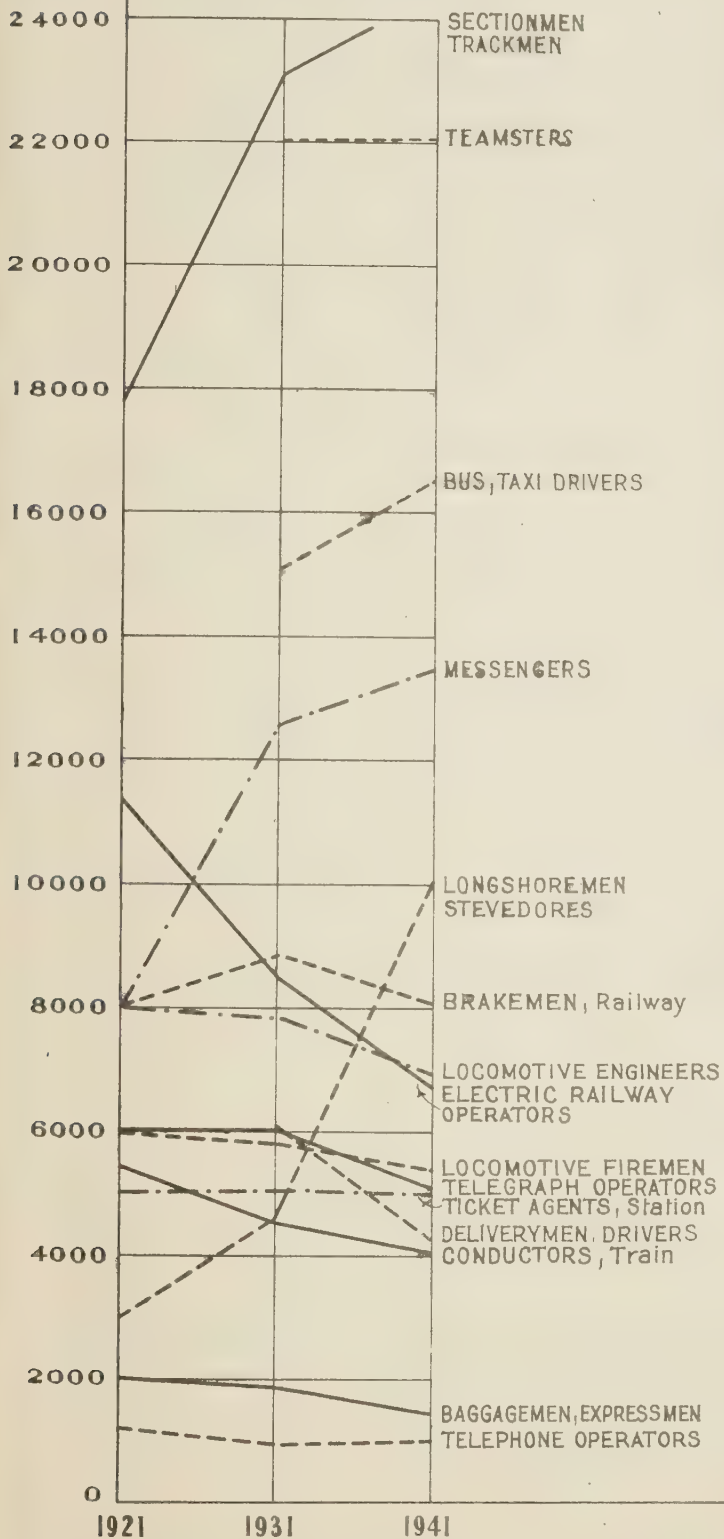
The distribution of construction workers by age divisions is given in Table 49.

Chart 32

MALE WORKERS IN SELECTED OCCUPATIONS

1921, 1931, 1941

TRANSPORTATION



CONSTRUCTION

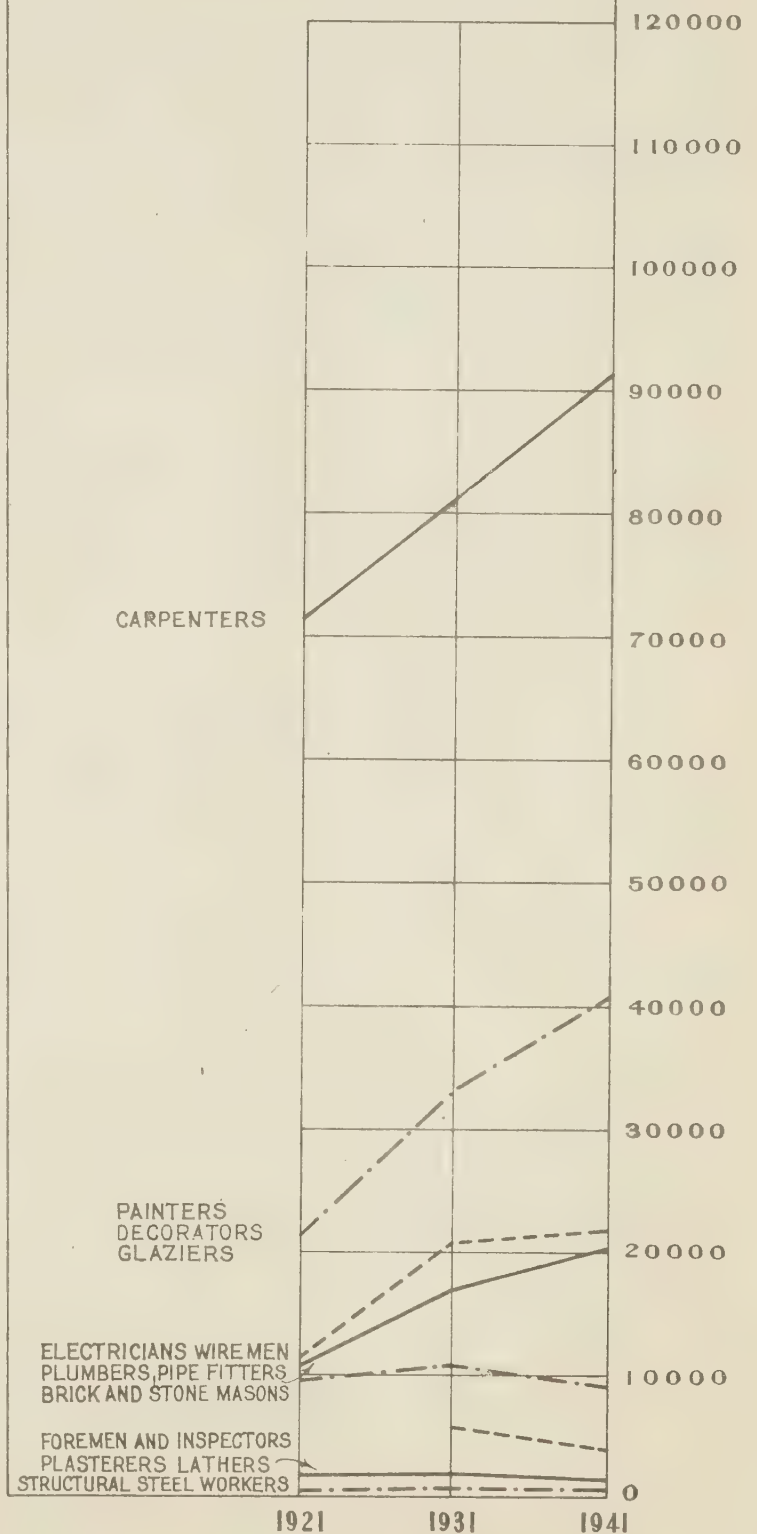


Table 49. Percentage of Construction Workers, 14 Years of Age or Over, in Selected Age Groups, Male and Female

Construction	M A L E				F E M A L E			
	14-19	20-44	45-64	65-70+	14-19	20-44	45-64	65-70+
Construction	3.2	49.2	41.0	6.6	29.5	58.4	10.3	1.8
Owners, managers	0.1	31.6	57.8	10.5	3.7	66.7	29.6	-
Foremen	-	36.6	55.0	8.4				
Inspectors	-	34.5	57.2	8.3				
Brick and stone masons	2.1	40.0	47.1	10.8				
Carpenters	2.4	43.8	45.3	8.5				
Electricians and wiremen	5.9	65.4	27.2	1.5				
Painters and glaziers, decorators	3.8	55.1	35.6	5.5	32.6	57.4	7.9	2.1
Plasterers and lathers	2.1	47.4	44.3	6.2				
Plumbers and pipe fitters	5.0	55.3	36.0	6.7				
Structural iron workers	3.3	62.0	32.8	1.9				
Other construction occupations.	4.0	55.4	46.7	3.9	19.0	62.0	19.0	-

Length of Schooling for Construction Workers:

Percentage of construction workers for each of the component occupations are given in Table 50.

Table 50. Percentage of Construction Workers, According to Occupation and Years at School, June 2, 1941

Construction	Years at School							
	M A L E				F E M A L E			
	0-4	5-8	9-12	13+	0-4	5-8	9-12	13+
Construction	11.0	55.0	30.9	3.1	2.4	34.5	55.4	7.7
Owners, managers	7.2	44.0	39.0	9.8	14.8	51.8	33.4	-
Foremen	11.5	54.1	30.1	4.3				
Inspectors	2.0	34.4	49.6	14.0				
Brick and stone masons	14.8	58.0	25.5	1.7				
Carpenters	14.5	58.6	24.9	2.0				
Electricians and wiremen	3.7	42.4	47.0	6.9				
Painters and glaziers, decorators ..	8.1	55.1	33.8	3.0	1.7	35.7	56.7	5.9
Plasterers and lathers	14.0	56.6	28.2	1.2				
Plumbers and pipe fitters	6.1	55.0	36.4	2.5				
Structural iron workers	14.4	54.6	28.4	2.6				
Other construction occupations ...	15.0	56.8	26.0	2.2	14.4	42.8	42.8	-

5. TRANSPORT STATISTICS

Railways:

There were 42,339 miles of track in operation in 1943. The rolling stock included 4,315 locomotives, 6,342 passenger cars, and 155,311 freight cars. These figures, in all cases, were slightly less than comparable ones from 1939. The funded debt for 1944 was \$1,794,000,000 and the stocks held amounted to \$1,578,000-000. These together were greater than in 1939. Operating expenses took about three-quarters of the gross earnings in 1942.

By 1944 railway revenue had risen to \$796,636,786 which was about 129 per cent above that for 1938 while operating expenses increased to \$634,774,021 of which \$372,064,613, including some \$10,000,000 back pay was salary and wages.

The railways had done very well financially from 1920 to 1930 but were hard hit from 1930 to 1940. The average passenger journey increased from 86 to 105 miles from 1939 to 1942 while the average number of passengers on the trains more than doubled during the same period and almost tripled by 1944. Similarly the average haul for freight trains increased from 372 to 417 miles and tonnage per train from 602 to 720 from 1939 to 1942. The total for 1942 was above 135 million tons which was an increase of 59 p.c. over 1939, or considering the length of haul 78 p.c. This was about 35 p.c. above the previous peak in 1938. By 1944 freight shipments had increased to 154,847,000 tons or 83 p.c. above the 1939 figures. Shipments of war materials, and the long haul to the Atlantic coast accounted for much of this.

Freight hauled in 1943 could be classified as: \$54,312,961 worth of mineral products; \$51,107,542 manufactured and miscellaneous goods, \$30,977,238 agricultural products, \$13,438,784 forest products and \$3,477,739 animal products.

In 1944 there were 8 passengers, 103 employees, and 136 others killed and 416 passengers, 13,492 employees and 360 others injured in train, non-train, and other railway accidents. Time lost due to injuries amounted to 336,163 days, an amount which was 2.3 times the loss in 1938. The majority of employees injured were trainmen and trackmen.

Motor Vehicles:

The number of motor vehicles reached its peak and began to decline after 1941. At that time there were 1.5 million registered. Many of these were used for commercial purposes and kept 6,617 working proprietors, and 19,074 full time workers employed. Gasoline consumption increased after the worst years of the depression until conservation measures were adopted in 1941. Consumption amounted to 746,000,000 gallons at that time.

The number of fatalities directly or indirectly connected with motor vehicles was 1,358 and the number injured was 21,175 (1941).

Seaways:

The St. Lawrence is usually open for navigation from the end of March or April to the middle of December, the Hudson's Bay route for a few months most years. Considerable freight passes through the locks during that time. For shipping abroad, Canada has six main harbours; Halifax, Saint John, Quebec, Three Rivers, Montreal and Vancouver.

Wire Communications:

The gross revenue from Canadian telegraphs was \$14,826,431 in 1942. To supplement the continental lines there are 14 trans-oceanic cables on the Atlantic and two on the Pacific. There were 7,544 employees.

The number of telephones was as follows: 463,627 business, 867,307 residential, 266,176 rural and 30,465 public pay, a total of 1,627,775 or about one for every seven of the population. It was estimated that there were 1,842 calls per telephone, 27.2 of which were long distance.

Radio:

Radio-telegraph stations on the coast handled 365,859 messages and helped provide service for aviation, fishermen, etc.

Postal Service:

There were over 12,300 post offices in Canada with a revenue of more than \$31,000,000.

The Press:

In 1941 there were 107 daily, 7 semi-weekly, 953 weekly, 60 semi-monthly, 482 monthly, 97 bi-monthly or quarterly and 81 miscellaneous, a total of 1,811 news publications.

Summary:

The above data indicates considerable disruption or change during the war years. Where freight train displaced water or truck transport there is the possibility of a swing back as soon as ships and trucks are available. Despite the increase in passenger traffic little new rolling stock was obtained because of scarcity of labour and materials. Old equipment was brought back into use and luxury cars were converted into day coaches. All of which indicates that considerable sums must be spent to bring the standard of accommodation up to pre-war level. This will provide considerable work for those in manufacturing and construction.

The railway manpower situation was tight during the war years. More than 40,000 or 20 p.c. of the trained personnel enlisted in the armed forces and many senior officials were on loan to the government. Retirement was practically stopped and superannuated employees were recalled to active work. In such a situation there should be opportunity for employment for those who return, those who have entered since 1939 and probably new men who wish to enter the field of transportation. The number of truck drivers will increase significantly.

The number installing and servicing telephones should increase and the radio field should expand considerably with some increase in Frequency Modulation sets, the possibility of some interest in television, inter-office communication and replacement of many obsolete worn-out sets.

Trend in Workers in Transportation 1921-1941:

Census data for years 1921, 1931 and 1941 (with those on Active Service included), show an increase in the number of males employed in transportation, and an increase in the number of females from 1921 to 1931 but a drop from 1931 to 1941. (Other transportation statistical data show more than twice as many female employees in 1944 and in 1941.) Figure however, does not show an increase in all cases for transportation occupations. Considering railway employees first it is found that there were fewer employed as officials, locomotive engineers and firemen, conductors, baggage men, expressmen, switchmen, signalmen, flagmen and telegraph operators. There were about the same number of station agents, brakemen, train dispatchers and yardmen. None showed a significant increase and none showed an increase comparable with the increase in population.

The picture was more confused for water transportation. There was some increase in the number of lockkeepers, canalmen and boatmen and considerable increase in the number of longshoremen and stevedores indicating more traffic and trade but the number of linemen and cablemen remained about the same the there were fewer firemen, trimmers and seamen. The 1941 figures represent a point before

Canada's merchant marine or her ship-building industry had reached its wartime peak. It is as yet impossible to estimate 1951 figures.

Messengers and radio station operators increased in number. Truck drivers more than doubled in number from 1931 to 1941.

Females employed as telegraph operators dropped from 941 in 1921 to 749 in 1931 and 548 in 1941, while telephone operators changed from 12,827 in 1921 to 14,375 in 1931 and back to 12,441 in 1941. Number of telephone operators required is affected by installations of automatic switchboards, closing of small offices or centralizing of control and number of telephones in operation.

Transportation Employees in 1944:

A preliminary report of the Transportation Branch of the Dominion Bureau of Statistics reports the number of employees in transportation positions, salary or wages, time worked, etc. The number of employees, which is the average of counts made each month, was 175,095^x or 3.2 p.c. above 1943 and the number of females employed included in the total had increased to 13,387 or by 33 p.c.

Wage-earners in Transportation Showing Average Earnings, 1941.

Information is available on transportation employees' average earnings and weeks employed for the year preceding the census date, June 2, 1941. As 1941 was a peak year for employment the number of males losing time in transportation and the average amount of time lost in weeks for all employed in transportation, are given in Table 51.

Table 51. Wage-earners in Transportation Showing Average Earnings and Average Weeks Employed for the Year Ending June 3, 1941.

	1 9 4 1						1 9 3 1	
	M A L E			F E M A L E				
	Total	Aver-		Total	Aver-		Average	
Male	Aver-	age		Female	age		Number	
Wage-	age	Weeks		Wage-	age	Weeks	Males	of weeks
earn-	Earn-	Em-		earn-	Earn-	Em-	Losing	lost
ers	ings	ployed		ers	ings	ployed	Time	
Managers	4,863	2,962	50.86	45	1,448	51.73	122	0.92
Foremen	4,425	1,833	49.79	339	1,119	51.41	1,236	2.42
Inspectors	2,421	1,671	49.68	11	871	45.45	950	2.09
Agents - ticket, station	4,904	1,848	49.96	83	695	43.72	415	1.52
Aviators- not armed forces	557	2,670	44.81	5	1,380	47.60		
Baggage and Expressmen.	1,460	1,440	47.97				372	3.09
Brakemen - railway ..	7,997	1,476	44.92				4,124	10.69
Bus drivers	2,854	1,183	47.25	6	467	34.33	4,347	0.82
Captains, mates, pilots .	3,071	1,482	38.76				1,518	9.43
Chauffeurs, taxi drivers	8,829	733	42.27	42	483	35.10	4,347	0.82
Conductors-steam rly. .	4,229	2,145	49.07				946	3.45

^x These totals should not be compared with census data without allowing for difference in criteria and specifications. They may, however, be compared with other data previously issued by the same branch.

Table 51. Wage-earners in Transportation Showing Average Earnings and Average Weeks Employed for the Year Ending June 3, 1941 - Concluded

	1 9 4 1						1 9 3 1	
	M A L E			F E M A L E			Males Losing Time	Average Number of weeks lost
	Total	Aver-	Aver-	Total	Aver-	Aver-		
	Male Wage- earn- ers	age Earn- ings	age Weeks Em- ployed	Female Wage- earn- ers	age Earn- ings	age Weeks Em- ployed		
Deliverymen, drivers ..	3,735	450	35.34	9	200	27.56	1,849	6.44
Dispatchers - train ...	533	2,495	50.94				39	1.01
Engineering Officers - ships	2,498	1,362	41.07				1,618	11.18
Firemen and trimmers ..	1,450	682	34.91				1,199	14.52
Linemen and cablemen ..	6,974	1,351	46.08				2,542	7.34
Lockkeepers, canalmen ..	1,353	868	39.51				436	7.49
Locomotive engineers ..	7,088	2,278	48.66				1,977	4.11
Locomotive firemen ...	5,235	1,470	45.61				2,999	11.61
Longshoremen, stevedores	9,476	744	28.96				3,799	19.52
Messengers	11,607	371	32.63	197	245	30.22	3,607	6.75
Radio announcers	386	1,398	46.84	25	1,117	39.17		
Radio stn. operators ..	1,140	1,238	43.80				129	5.68
Seamen, n.e.s. Marine ..	5,417	616	33.00				3,738	8.16
Sectionmen	24,422	864	40.67				8,904	8.12
Operators-electric rly.	6,544	1,347	48.77				946	3.45
Switchmen, signalmen ..	3,864	1,253	45.53				1,649	7.98
Teamsters	16,490	822	42.42	15	579	40.93	7,954	9.36
Telegraph operators ..	4,812	1,574	47.64	546	948	45.28	2,019	4.31
Telephone operators ..	1,016	1,120	46.82	12,312	635	44.50	175	3.02
Truck drivers	287	613	40.29	86	502	34.99	16,591	9.20
Yardmen	2,176	1,226	45.07				799	6.22
Other transport occu- pations	2,431	1,041	45.44	103	768	40.66	335	5.09

Table 52. Percentage of Transportation Workers Distributed According to Occupation and Age Groups

Transportation and Communication	M A L E				F E M A L E			
	14-19	20-44	45-64	65-70+	14-19	20-44	45-64	65-70+
Transportation and communication	7.5	59.0	31.6	1.9	13.8	76.2	9.4	0.6
Owners, managers	0.0	42.0	53.0	5.0	1.0	50.0	44.0	5.0
Foremen	0.0	33.9	63.2	2.9	0.5	78.8	19.2	1.5
Inspectors	0.2	31.7	65.7	2.4	18.2	72.7	9.1	-
Agents - ticket, station	0.8	36.7	60.3	2.2	3.6	67.5	27.7	1.2
Aviators - not in armed forces .	-	92.6	7.4	-	-	100.0	-	-
Baggage and expressmen	1.7	34.4	62.9	2.0				
Brakemen - railway	0.4	55.4	43.7	0.5				
Bus drivers	0.7	78.8	19.7	0.8		100.0		
Captains, mates, pilots	1.1	50.3	42.0	6.6				
Chauffeurs and taxi drivers ...	3.1	72.8	22.7	1.4	9.8	74.6	14.3	1.3
Conductors, steam railway	-	12.4	85.7	1.9				
Deliverymen and drivers, n.e.s..	45.1	46.5	7.9	0.5	70.0	20.0	10.0	-
Dispatchers, train	-	28.7	68.5	2.8				

Table 52. Percentage of Transportation Workers Distributed According to Occupation and Age Groups - Concluded.

Transportation and Communication	M A L E				F E M A L E			
	14-19	20-44	45-64	65-70 +	14-19	20-44	45-64	54-70 +
Engineering officers - ships ..	0.7	51.6	42.2	5.5				
Firemen and trimmers - ships ..	5.4	69.7	22.7	2.2				
Linemen and cablemen	4.8	62.2	32.0	1.0				
Lockkeepers, canalmen, boatmen ..	1.6	40.3	52.9	5.2				
Locomotive engineers	-	13.1	84.9	2.0				
Locomotive firemen	0.3	59.9	39.4	0.4				
Longshoremen and stevedores ..	2.7	61.7	32.9	2.7				
Messengers	72.9	18.0	8.0	1.1	70.0	28.1	14.3	7.6
Radio announcers	3.9	89.6	6.2	0.3	4.0	80.0	16.0	-
Radio station operators	3.7	88.1	8.2	-				
Seamen, n.e.s.	15.7	66.8	15.6	1.9				
Sectionmen and trackmen	2.8	52.3	43.9	1.0				
Operators - electric railway ..	-	39.2	56.4	4.4				
Switchmen, signalmen	1.2	45.4	51.5	1.9				
Teamsters and carriage drivers.	5.7	60.5	29.7	4.1	20.0	60.0	20.0	-
Telegraph operators	3.2	58.5	37.3	1.0	8.8	71.5	18.2	1.5
Telephone operators.	7.2	60.0	30.2	2.6	13.6	77.7	8.3	0.4
Truck drivers	5.8	78.7	14.7	0.8	20.2	68.7	9.0	2.1
Yardmen (railway) n.e.s.	3.0	46.8	48.7	1.5				
Other transport occupations ..	3.4	46.3	46.3	4.0	15.5	54.5	24.5	5.5

Number of Years at School for Transportation Personnel

Few aviators have had four years or less at school, while more than 20 p.c. of longshoremen, stevedores, sectionmen and trackmen fall in that category. Similarly 31 p.c. of aviators, 36.6 p.c. of radio announcers and 24.6 p.c. of radio station operators have spent 13 or more years at school while but 1.0 p.c. of sectionmen, longshoremen and stevedores had as much as thirteen years at school. Comparative percentages for years at school for transportation and communication occupations are given in Table 53.

Table 53. Transportation Personnel Distributed by Years at School

Transportation and Communication	M A L E				F E M A L E			
	0-4	5-8	9-12	13+	0-4	5-8	9-12	13+
Transportation and communication	9.3	54.0	33.7	3.0	0.7	23.7	68.4	7.2
Owners, managers	4.0	34.2	49.6	12.2	3.0	27.0	60.0	10.0
Foremen	6.6	50.1	38.5	4.8	1.5	25.4	62.4	10.7
Inspectors	4.8	45.5	43.1	6.6	27.3	63.6	9.1	
Agents - ticket, station	1.1	25.1	64.0	9.8	18.1	73.5	9.4	
Aviators - not in armed forces .	0.5	7.8	60.7	31.0			66.7	33.3
Baggage and expressmen	2.3	44.9	47.4	5.4				
Brakemen - railway	4.2	49.1	43.1	3.6				
Bus drivers	3.7	50.2	42.7	3.4	33.3	66.7		
Captains, mates, pilots	5.8	50.9	38.9	4.4				
Chauffeurs and taxi drivers ..	8.0	59.0	30.7	2.3	4.8	31.8	54.0	9.4
Conductors, steam railway	5.5	53.2	39.8	3.5				
Deliverymen and drivers, n.e.s..	7.7	60.9	30.3	1.1		60.0	30.0	10.0
Dispatchers, train	1.5	31.2	60.7	6.6				
Engineering officers - ships ..	4.0	49.0	41.7	5.3				

Table 53. Transportation Personnel Distributed by Years at School - Concluded.

Transportation and Communication	M A L E				F E M A L E			
	0-4	5-8	9-12	13+	0-4	5-8	9-12	13+
Firemen and trimmers - ships	9.0	58.6	30.4	2.0				
Linemen and cablemen	5.0	46.4	43.2	5.4				
Lockkeepers, canalmen, boatmen	11.1	59.5	27.5	1.9				
Locomotive engineers -	5.5	54.9	35.6	4.0				
Locomotive firemen	5.8	56.5	35.8	1.9				
Longshoremen and stevedores.	21.0	60.3	17.7	1.0				
Messengers	3.1	51.0	44.4	1.5	1.4	41.4	56.2	2.0
Radio announcers	0.5	7.0	55.9	36.6		4.0	48.0	48.0
Radio station operators ..	0.4	11.5	63.5	24.6				
Seamen, n.e.s.	6.0	57.5	34.5	2.0				
Sectionmen and trackmen ...	27.0	57.5	14.5	1.0				
Operators - electric railway	5.4	52.7	38.3	3.6				
Switchmen, signalmen	8.1	54.7	34.2	3.0				
Teamsters and carriage drivers	13.6	54.8	29.4	2.2	13.3	53.3	33.4	
Telegraph operators	1.0	29.8	61.5	7.7	1.6	21.2	67.5	9.7
Telephone operators	2.2	38.8	52.2	6.8	0.5	23.2	69.4	6.9
Truck drivers	7.9	59.3	31.1	1.7	4.4	34.3	53.5	7.8
Yardmen (railway) n.e.s. ..	8.6	52.1	37.0	2.3				
Other transport occupations.	9.6	50.3	35.6	4.5	5.5	37.6	49.6	7.3

Conjugal Condition of Workers in Transportation and Communication

The conjugal condition of male and female workers in transportation and communication occupations may be observed from the following statement.

Table 54. Conjugal Condition of Workers in
Transportation and Communication

	M A L E				F E M A L E			
	Single	Married	Widowed	Divorced, Separated	Single	Married	Widowed	Divorced, Separated
Transportation & communication .	73,249	172,293	5,852	3,184	11,854	1,269	592	349
Owners, managers.	590	6,243	208	75	47	12	33	8
Foremen	240	3,961	159	45	270	46	12	11
Inspectors ...	175	2,143	80	22	9	2	-	-
Agents - ticket, station	538	4,183	145	38	64	12	7	-
Aviators-not in armed forces ..	186	368	4	8	-	-	-	-
Baggagemen and expressmen ..	255	1,146	45	14	-	-	-	-
Brakemen-railway	1,584	6,079	214	119	-	-	-	-
Bus drivers ..	518	2,364	35	44	4	-	-	1
Captains, mates, pilots	643	2,630	122	40	-	-	-	-
Chauffeurs and taxi drivers ..	4,104	7,594	268	313	3	2	-	1

Table 54. Conjugal Condition of Workers in Transportation and Communication. - Concluded

	M A L E				F E M A L E			
	Single	Married	Widowed	Divorced, Separated	Single	Married	Widowed	Divorced, Separated
Conductors-steam								
railway	225	3,760	172	52	-	-	-	-
Deliverymen and								
drivers, n.e.s....	2,712	1,101	35	20	39	14	5	5
Dispatchers -train	37	479	14	3	-	-	-	-
Engineering								
officers - ships.	514	1,885	79	24	-	-	-	-
Firemen & trimmers								
- ships	678	723	33	16	-	-	-	-
Linemen & cablemen	1,559	5,218	126	71	-	-	-	-
Lockkeepers, canal-								
men, boatmen ,...	251	1,128	78	21	-	-	-	-
Locomotive engineers	417	6,235	318	116	-	-	-	-
Locomotive firemen	893	4,149	120	72	-	-	-	-
Longshoremen and								
stevedores	2,683	6,202	356	235	-	-	-	-
Messengers	10,102	1,514	72	23	208	1	1	-
Radio announcers .	193	183	3	7	16	4	2	3
Radio station								
operators	570	558	4	8	-	-	-	-
Seamen, n.e.s. .	3,235	2,123	84	51	-	-	-	-
Sectionmen and								
trackmen	5,358	18,028	697	339	-	-	-	-
Operators-electric								
railway	502	5,706	244	92	-	-	-	-
Switchmen, signalmen	704	2,960	142	58	-	-	-	-
Teamsters and								
carriage drivers.	5,081	12,920	601	233	11	1	-	3
Telegraph operators	954	3,725	87	46	433	61	40	14
Telephone operators	331	653	23	13	10,599	1,078	466	296
Truck drivers ...	26,432	52,839	1,132	900	74	18	9	3
Yardmen (railway)								
n.e.s.	456	1,635	56	29	-	-	-	-
Other transport								
occupations ...	529	1,809	96	37	67	23	16	4

6. TRADE AND COMMERCE

Trade has been described as the lifeblood of a nation. Modern economic civilization depends on the availability and exchange of commodities. Poorly regulated trade, with all that it involves, may be instrumental in causing wars while properly regulated trade aids in providing work and a fair level of living for all. Basically, trade depends on supply and demand but both of these are resultants from innumerable interacting forces. Supply may entail possession of natural resources, making of these available on the market, processing them when necessary, transportation, etc. Economic demand is a function of the country's natural wealth, shortages, degree of industrialization, level of living, tariff

regulation, advertising, and such. All, or any of these factors may be altered from time to time or nullified by such other factors as war, prolonged drought, etc.

During war years the structure of world trade was altered to take account of such factors as losses by submarine, shortages, restricted trading areas, increased war demands, etc. These may make price pegging, rationing, priorities and various other restrictions, expedient at home and influence trade abroad. During World War II they influenced trade between Great Britain and Canada and between Canada and the United States. Canada used various expedients to enable the United Kingdom to obtain Canadian dollars to buy Canada's goods. She also curtailed civilian spending during the first years of the war and sold Americans Canadian bonds to obtain American dollars to purchase goods for war purposes. During the pre-war years the trade balance was adjusted by a multilateral system of settlement of trade debts in which, for example, the trade between Canada, the United States and the United Kingdom, allowing for the difference in exchange, tended towards an equilibrium. International trade in post war years has a long way to go before all nations of the world raise their standard of living and a free interchange of surpluses can take place without lowering the level of living of any nation or without any nation feeling a need for going to war to obtain more territory, more raw commodities, or greater markets.

Canadian trade may be classified as internal and external. External trade considers commodities exported from the country or imported into the country while internal trade ranges from barter and small shop business to that of larger wholesale and retail transactions extending over much of Canada.

In 1939 Canada's imports totalled \$751,000,000; in 1943, \$1,735,000,000. In 1939 the United Kingdom supplies 15.2 p.c., the United States 66.1 p.c., while in 1943 the United Kingdom supplies 7.8 p.c. and the United States 82.1 p.c. For the same years her exports were: \$24,900,000 and \$2,971,500,000 respectively with 24.8 p.c. going to the United Kingdom and 38.7 p.c. to the United States. There is little likelihood that these ratios or amounts will last now that the war is over. Canadian exports were preponderantly war materials and foodstuffs in 1943 and a large percentage of the imports were for the same purpose. Continuance of her present favourable economy and high employment will depend largely on her ability to maintain foreign markets and increase home consumption.

Tourist Trade:

Trade in services is an important part of Canada's trade whether it be those of a medical practitioner, railway or other service industry. Outstanding among these is Canada's tourist industry. In the pre-war years this traffic had developed until an estimated \$149,000,000 was spent annually by tourists in Canada. The war greatly curtailed this trade which should expand in post-war years with more and better roads and other added accommodations to attract the tourists. Visitors from the United States greatly exceeded expectations in 1945.

Internal Trade:

The greater part of Canada's trade consists in an exchange of products and providing goods and services for consumption or use by a population of eleven and one-half million scattered over half a continent. Productive operations in 1943 contributed an estimated \$8,700,000 to the national income which gives some idea of the importance of internal trade considering exports to be about \$2,971,500,000.

There were 24,758 wholesale trading establishments with sales of over five billion dollars employing 94,627 male and 22,844 female employees in addition

to the 13,656 working proprietors. These included 9,417 wholesales proper together with agents and brokers, grain elevators, bulk petroleum tank stations, etc.

A total of 137,331 retail establishments in 1941 ranging from shop to corporation transacted over \$3,400,000 sales and employed some 188,500 males and 108,500 females in addition to 132,000 working proprietors. Installment selling accounted for about 9 p.c. of the transactions while 532 chain store companies absorbed 18.7 p.c. of the business. Undoubtedly the total volume would have been considerably greater except for shortages, particularly of durable goods.

Service Establishments:

There were 49,271 service establishments in 1941 with total receipts of \$254,700,000. These included 14,529 barber shops and beauty parlours, 1,244 motion picture theatres, etc.

Co-operatives:

Co-operatives are on the increase. There were 1,674 reported in 1943 handling food products, clothing and home furnishings and petroleum products, etc. Operating successfully were also 1,780 credit unions chartered, several mutual insurance companies, co-operative housing, hospitalization and medical services.

Commercial Failures:

According to records of Dun and Bradstreet and the Dominion Bureau of Statistics, the greater number of commercial failures are found among trading establishments. Out of a total of 882 failures in 1941, 614 were retail trading establishments including 213 in food and 82 in wearing apparel. Of the 130 manufacturers who failed, 25 were in food, 23 in textiles and 17 in forest products. Only 42 failed in the wholesale division, 15 of these were in farm products, foods and groceries, 55 in construction, of whom the majority were building sub-contractors.

The number of establishments declaring bankruptcy varied greatly from year to year. It did not follow fluctuations of income as shown in the graphs of Part II. High points were from 1913-16, 1921-24, 1929-33 and points of few failures were 1903, 1919, 1937, 1943 and 1944. Failures are related to boom periods of investment and depressions as well as shifting of markets, technological advance, and such factors which form part of the struggle for markets in business.

Percentage of commercial failures distributed by provinces and branches of business, 1933-1943, were as follows:

<u>Province</u>	<u>Per cent</u>	<u>Branch of Business</u>	<u>Per cent</u>
Quebec	51.4	Trade	50.0
Ontario	30.7	Manufacturing	18.2
Saskatchewan	3.9	Service	12.3
Manitoba	3.3	Agriculture	6.8
Alberta	3.1	Not Classified	6.0
British Columbia	3.0	Construction	3.6
Nova Scotia	2.3	Transportation	1.5
New Brunswick	2.0	Mining	0.8
Prince Edward Island	0.3	Finance	0.6
		Logging	0.2
	<u>100.0</u>		<u>100.0</u>

Trend in Numbers Gainfully Occupied In Trade, 1921, 1931, 1941

The number of males gainfully occupied in trade increased considerably from 1921 to 1941 but indicated no further change in total number by 1941. The number of females increased during both decades.

The number of male owners, managers and dealers in retail and wholesale trade increased during the 20-year period. From 1931 to 1941 the following trade occupations showed an increase in numbers, floorwalkers and foremen, advertising agents, commercial travellers, canvassers and demonstrators, credit men, inspectors, graders, samplers, packers, wrappers, labellers, purchasing agents and buyers, and window decorators. The following showed a drop in numbers for the last decade; auctioneers and appraisers, bill collectors, hawkers and peddlers, newsboys and salespeople in stores.

Similarly the number of female owners, managers and dealers in retail and wholesale trade increased during the 20-year period. Window decorators and sales girls increased in number during both decades and the number of females in the other trade occupations increased during the second decade.

In finance while marked increases were noted in the number of male insurance agents and brokers during the decade ending 1931 both showed a drop in number by 1941. Real estate agents showed a drop for both decades. Female insurance agents and real estate agents and dealers showed an increase for both decades.

Age Range of Trade Workers:

The percentage of workers in various selected age groups for those occupied in trade in Canada may be obtained from census tabulations. The following Table (55) for males and females, as might be expected, shows considerable variation indicating that certain positions are open mainly to youth, other are spread fairly evenly throughout the working age range.

Table 55. Percentage of Males and Females in Selected Trade Occupations Distributed by Age, 1941

Trade Position	M A L E S				F E M A L E S			
	14-19	20-44	45-64	65-70+	14-19	20-44	45-64	65-70+
All trade	4.8	55.6	34.2	5.4	17.9	68.9	11.7	1.5
Owners, managers - retail ..	0.3	47.4	43.7	8.6	0.8	46.4	43.8	9.0
Owners, managers - wholesale	0.2	44.0	48.2	7.6	2.1	55.9	40.3	1.7
Floorwalkers and foremen ..	5.0	54.7	41.6	3.2	6.9	75.4	16.9	0.8
Advertising agents	0.7	62.5	33.9	2.9	5.3	77.3	16.4	1.0
Auctioneers and appraisers .	0.6	30.7	56.4	12.3				
Brokers and agents	1.7	51.8	41.6	5.9	3.2	64.5	29.9	2.4
Collectors, bill	2.9	54.0	35.8	7.3	1.4	58.1	27.6	12.9
Commercial travellers	0.6	61.0	34.7	3.7	8.5	66.2	25.3	-
Credit men	0.1	64.1	34.4	1.4	3.1	77.1	19.8	-
Hawkers and pedlars	3.3	41.4	47.2	8.1	7.6	46.2	46.2	-
Inspectors, graders	5.1	59.1	33.1	2.7	28.1	67.5	4.3	0.1
Window decorators	4.1	74.7	20.3	0.9	6.3	73.3	18.6	1.8
Newsboys	34.3	50.7	12.8	2.2	57.1	42.9	-	-
Packers, wrappers	18.9	56.6	21.8	2.7	34.7	62.3	2.8	0.2
Purchasing agents, buyers ..	0.2	59.5	37.7	2.6	1.8	70.5	26.7	1.0
Canvassers and demonstrators	1.7	61.6	32.4	4.3	5.5	68.2	24.6	1.7
Salespeople in stores	13.1	65.8	18.8	2.3	17.7	74.2	7.6	0.5
Other trade occupations ..	4.7	59.1	32.9	3.3	24.4	72.3	3.3	-

Table 56. Percentage of Trade Personnel 14 Years and Over,
Distributed in Selected Groups

Trade	M A L E				F E M A L E			
	14-19	20-44	45-64	65-70+	14-19	20-44	45-64	65-70+
Trade	4.8	55.6	34.2	5.4	17.9	68.9	11.7	1.5
Owners, managers - retail	0.3	47.4	43.7	8.6	0.8	46.4	43.8	9.0
Owners, managers-wholesale	0.2	44.0	48.2	7.6	2.1	55.9	40.3	1.7
Floorwalkers and foremen.	0.5	54.7	41.6	3.2	6.9	75.4	16.9	0.8
Advertising agents	0.7	62.5	33.9	2.9	5.3	77.3	16.4	1.0
Auctioneers and appraisers	0.6	30.7	56.4	12.3	-	-	-	-
Brokers and agents, n.e.s.	1.7	51.8	41.6	5.9	3.2	64.5	29.9	2.4
Collectors, bill	2.9	54.0	35.8	7.3	1.4	58.1	27.6	12.9
Commercial travellers ..	0.6	61.0	34.7	3.7	8.5	66.2	25.3	-
Credit men	0.1	64.1	34.4	1.4	3.1	77.1	19.8	-
Hawkers and pedlars ...	3.3	41.4	47.2	8.1	7.6	46.2	46.2	-
Inspectors, graders ...	5.1	59.1	33.1	2.7	28.1	67.5	4.3	0.1
Window decorators	4.1	74.7	20.3	0.9	6.3	73.3	18.6	1.8
Newsboys	34.3	50.7	12.8	2.2	57.1	42.9	-	-
Packers, wrappers	18.9	56.6	21.8	2.7	34.7	62.3	2.8	0.2
Purchasing agents and buyers	0.2	59.5	37.7	2.6	1.8	70.5	26.7	1.0
Canvassers and demonstrators	1.7	61.6	32.4	4.3	5.5	68.2	24.6	1.7
Salespersons in stores ..	13.1	65.8	18.8	2.3	17.7	74.2	7.6	0.5
Other trade occupations .	4.7	59.1	32.9	3.3	24.4	72.3	3.3	-

Table 57. Wage-earners in Trade Showing Average Earnings and Weeks Employed During
the Year Ending June 2, 1941, and Number Not at Work, June 2, 1941

	1 9 4 1				1 9 3 1			
	Total Wage- earn- ers	Average Earn- ings	Average Weeks Em- ployed	Number Absent June 2	M A L E		F E M A L E	
					Number Losing Time	Aver- age x Weeks Lost	Number Losing Time	Aver- age x Weeks Lost
Retail managers	15,945	1,933	50.25	334	1,048	1.46	58	1.89
Wholesale managers	9,029	2,950	50.60	176	292	0.97	3	0.79
Floorwalkers, foremen ..	1,930	1,520	50.12	52	236	2.11	55	2.12
Advertising agents	1,937	2,104	47.77	113	287	3.70	21	3.08
Auctioneers, appraisers ..	347	1,876	48.37	12	35	2.28	35	3.32
Brokers, agents	1,669	1,942	49.09	55	451	2.11	7	1.45
Canvassers, demonstrators.	6,705	1,258	46.28	372	424	4.62	-	-
Collectors, bill	1,580	1,073	46.15	182	2,607	3.54	14	5.79
Commercial travellers ..	29,881	1,748	48.67	1,114	46	1.28	14	3.83
Credit men	1,148	2,084	50.16	27	172	4.59	1	1.23
Hawkers, pedlars	695	490	36.13	90	355	10.64	3	19.00
Inspectors, graders	3,076	1,239	45.74	167	654	4.57	161	8.88
Window decorators	696	1,211	46.24	56	-	-	48	6.28
Newsboys	323	428	39.50	19	87	5.48	-	-
Packers, wrappers	7,020	768	40.95	-	-	-	-	-
Purchasing agents	9,000	1,643	49.81	228	759	2.38	32	2.51
Salespersons in stores ...	78,202	854	44.18	7,825	23,837	5.66	12,196	6.18
Other trade occupations ..	894	1,062	46.83	48	203	3.61	50	8.12

x Average weeks lost is an average for all wage-earners in trade.

Years of Schooling:

Those occupied in trade on the average rated considerably higher in years at school than the average for the working population. Within the trade group there is considerable variation. Hawkers and pedlars made the poorest showing and advertising agents the best.

Some idea of the number of years of schooling possessed by members of the selected trade sub-groups may be obtained from Table 58. Interesting comparisons may be made between this and other groups and among the sub-groups.

Table 58. Years of Schooling for "Trade" Employees

Trade	M A L E				F E M A L E			
	0-4	5-8	9-12	13+	0-4	5-8	9-12	13+
Trade	5.3	36.1	48.6	10.0	1.9	30.4	61.6	6.1
Owners, managers - retail	8.4	40.7	41.6	9.3	7.3	36.2	49.0	7.5
Owners, managers - wholesale ..	4.7	29.0	51.1	15.1	2.5	24.1	60.3	13.1
Floorwalkers and foremen	4.4	43.4	45.4	6.8	0.9	32.9	61.4	4.8
Advertising agents	0.5	14.1	58.1	27.3	0.5	8.7	48.8	42.0
Auctioneers and appraisers ..	4.0	32.6	50.7	12.7	-	-	-	-
Brokers and agents, n.e.s. ..	1.6	26.2	56.0	16.2	0.8	14.6	63.4	21.2
Collectors, bill	2.6	30.9	54.8	11.7	-	20.0	67.7	12.3
Commercial travellers	1.3	25.0	59.3	14.4	-	21.4	51.4	11.2
Credit men	0.2	13.2	62.5	24.1	-	15.6	60.4	24.0
Hawkers and pedlars	35.3	47.5	15.5	1.7	46.2	23.1	31.7	-
Inspectors, graders	3.4	36.8	49.2	10.6	1.2	38.1	58.6	2.1
Window decorators	0.7	29.2	59.5	10.6	1.0	22.8	61.6	14.6
Newsboys	9.3	49.2	38.5	3.0	14.3	57.1	14.3	14.3
Packers and wrappers	7.8	53.3	36.4	2.5	2.6	43.8	51.7	1.9
Purchasing agents and buyers ..	2.6	32.7	54.3	10.4	0.4	18.1	62.4	19.1
Canvassers and demonstrators ..	3.5	35.5	48.8	12.2	2.9	29.1	58.6	9.4
Salespersons in stores	2.6	35.8	53.9	7.7	0.9	26.8	66.0	6.3
Other trade occupations	3.2	41.2	48.5	7.1	1.7	19.3	69.8	9.2

Conjugal Condition:

Conjugal condition of the males and females may be observed from the following statement which gives the number, single, married, widowed and divorced.

Table 59. Males and Females, 14 Years of Age and Over, in "Trade" Showing Conjugal Condition

	M A L E				F E M A L E			
	Single	Married	Widowed	Divorced	Single	Married	Widowed	Divorced
Trade	67,965	194,984	7,297	2,877	65,217	9,511	4,951	2,339
Owners, managers - retail	12,533	83,764	3,534	922	3,707	2,979	2,597	467
Owners, managers - wholesale	2,034	17,322	629	200	126	55	47	10
Floorwalkers and foremen	198	1,666	53	13	254	57	23	16
Advertising agents.	457	1,698	38	42	141	40	9	17
Auctioneers and appraisers	81	549	34	11				
Brokers and agents, n.e.s.	300	1,479	51	19	81	23	15	5

Table 59. Males and Females, 14 Years of Age and Over, in "Trade" Showing Conjugal Condition. - Concluded

	M A L E				F E M A L E			
	Single	Married	Widowed	Divorced	Single	Married	Widowed	Divorced
Collectors, bill ...	452	1,198	55	28	44	9	7	2
Commercial travellers	5,066	23,769	703	343	52	9	8	2
Credit men	170	980	16	13	68	18	6	4
Hawkers and pedlars.	736	2,501	177	101	5	4	2	2
Inspectors, graders.	756	2,228	60	35	625	79	26	20
Window decorators ..	256	479	13	7	163	25	20	13
Newsboys	270	89	5	3	6	-	-	1
Packers, wrappers ..	3,117	3,700	143	76	10,779	986	172	228
Purchasing agents and buyers	1,214	7,566	176	45	372	59	40	23
Canvassers and demonstrators	1,548	4,838	213	120	429	115	97	62
Salespersons in stores	38,536	40,466	1,374	890	48,271	5,032	1,881	1,460
Other trade occupations	241	692	23	9	92	20	1	6

Occupational Status:

Two-thirds of those in trade were wage-earners. About two out of every nine were "own account" and one out of ten were employers. Slightly more than one out of every hundred were unpaid workers. Of the sub-groups listed above the wholesale and retail proprietors formed the largest group, the managers on salary about one-quarter of the group. The majority of hawkers and pedlars ran their own business while about half of the auctioneers and appraisers were independent. The majority of the other classes were employees.

Table 60 which follows, gives the numbers obtained by the census for this grouping, 1941.

Table 60. Males and Females, 14 Years of Age and Over, in Trade Showing Occupational Status

	M A L E				F E M A L E			
	E	O.A.	W	N.P.	E	O.A.	W	N.P.
Trade	26,521	73,254	170,155	3,207	1,653	7,201	70,116	3,050
Owners, managers - retail ...	22,431	62,325	15,945	55	1,595	7,052	1,071	32
Owners, managers - wholesale .	3,821	7,338	9,029	-	43	50	145	-
Floorwalkers and foremen ...	-	-	1,930	-	-	-	349	1
Advertising agents	39	260	1,937	-	2	27	178	-
Auctioneers and appraisers ..	20	230	425	-	-	-	-	-
Brokers and agents, n.e.s. ..	27	153	1,669	-	4	12	107	1
Collectors, bill	16	133	1,580	4	3	10	49	-
Commercial travellers	-	-	29,881	1	-	-	71	-
Credit men	9	22	1,148	-	2	1	93	-
Hawkers and pedlars	139	2,639	695	43	-	8	4	1
Inspectors, graders	-	-	3,076	3	-	-	748	2
Window decorators	6	53	696	-	4	36	181	-
Newsboys	1	43	323	-	-	-	7	-
Packers, wrappers	-	-	7,020	16	-	-	12,162	3
Purchasing agents, buyers ..	-	-	9,000	2	-	-	486	8
Canvassers and demonstrators .	-	-	6,705	14	-	-	703	-
Salespersons in stores	-	-	78,202	3,068	-	-	53,646	3,000
Other trade occupations	12	58	894	1	-	5	112	2

Note: E - Employer, O.A. Own account, W.- Wage-earner, N.P. - No pay.

7. FINANCE AND INSURANCE

Since its adoption money has proved to be a ready means of exchange for services and commodities. It enabled producers to spread purchases over the year, introduced credit, in fact made possible the present financial structure. There is at present no phase of our activity into which it does not come directly or indirectly. Finance is maintained by the endeavour of hundreds of executives and requires the services of many, in fact, in itself it is big business. It provides employment for 100,000 employees, in bank, real estate office, insurance company, investment and loan companies and related institutions.

Some idea of the amounts of money dealt with in financing the country's services and war effort during the six fiscal years ending March 31, 1945, may be gathered from the following: total Canadian war expenditures were more than \$15,138,000,000, while other expenditures such as interest on public debt brought the amount up to \$18,957,000,000. Of this total \$2,728,000,000 went to members of the United Nations. The United Kingdom also received an additional \$1,518,000,000. Total tax revenue for the six-year period were \$9,393,000,000 while other revenues increased the total to \$10,576,000,000. About two-thirds of this came from direct taxes in 1944 whereas direct taxes had yielded only about one-third of the revenue previous to 1939. To effect this the rates and scope of the income tax were increased, - more than one-sixth of the entire Canadian population paid this tax. A sliding scale was adopted so that the proportion going to taxes increased with increased income and a "pay-as-you-go" system was inaugurated in which most of the tax was withheld at the source. Corporation income was heavily taxed, a high excess profits tax being added.

Commodity and expenditure taxes including the 8 per cent sales tax added their quota. These covered more than 50 items and in many cases were two or three times as high as before 1939.

About half of the money used to finance the war was obtained through borrowing from corporations and individuals, in the main through the sale of bonds and certificates.

All of this hinged on Canada's monetary system. Her central note issue was permanently established in 1868. Steps followed to effect co-operation among the banks in issuing notes, credit control, and other aspects of bank activity. These culminated in the formation of the Bank of Canada, a central bank for bankers in 1934. Otherwise banking is carried on by 10 chartered banks with 3,084 branches, 1944, in Canada and 135 branches in other countries. Their assets in 1944 were \$5,267,000,000. Their business increased tremendously during war years but despite the enlistment of 7,000 young men, who were replaced by women, the extra load was handled expeditiously.

Insurance:

There were 41 registered companies together with a few provincial companies selling life insurance in 1943. These carried \$8,534,000,000 worth of life insurance, an average of \$741.66 per capita for all Canada, with total premiums of \$229,000,000 in 1943. The majority of the companies are Canadian.

More than half of the 267 fire insurance companies registered were of foreign origin. Other insurance companies with policies covering, automobile, sickness and accident, aircraft, earthquakes, etc. received annual premiums amounting to \$52,000,000.

Other companies in the field of commercial finance include 17 large loan and trust companies and a number of small loan companies some registered, some not.

Personnel:

There were 33,104 males, including those on Active Service, and 816 females in finance occupations, in 1941, which represents a decrease of almost 2,500 from 1931. Average earnings, and average weeks employed for 1941 and average number of persons losing time and the average time lost for all the personnel in finance may be observed from Tables 61 and 62, while Table 64 gives the years at school and Table 65, marital status of those in finance, 1941.

Table 61. Wage-earners in Finance Showing Average Earnings and Average Weeks Employed During the Year Ending June 2, 1941

	M A L E			F E M A L E			Out of work census date
	Male Wage-earners	Average Earn-ings	Average Em-ployed weeks	Female wage-earners	Average Earn-ings	Average Em-ployed weeks	
Managers	7,930	3,236	51.41	46	1,980	50.77	114
Insurance agents	10,993	1,752	48.50	323	950	46.86	417
Real estate agents, dealers.	1,456	1,662	46.20	74	923	47.83	93
Stock and bond brokers ...	1,895	2,331	47.87	30	1,557	49.77	72
Other financial occupations.	103	1,749	47.70	7	643	36.43	4

Table 62. Wage-earners in Finance, 1931 Showing Number Losing Time and Time Lost

	M A L E			F E M A L E		
	Male Wage-earners	Males Losing Time	Average Weeks Lost	Female Wage-earners	Females Losing Time	Average Weeks Lost
Officials, finance	5,301	121	0.5	12	1	2.2
Insurance officials	2,972	69	0.5	26	-	-
Insurance agents	13,838	1,766	2.9	325	37	2.7
Pawnbrokers, money lenders ..	25	4	2.0	-	-	-
Real estate agents, dealers .	1,864	335	5.7	49	4	2.0
Stock and bond brokers	2,906	485	5.0	35	3	2.1
Other	104	17	3.8	-	-	-

Table 63. Percentage of Finance Personnel in Selected Age Groups

	M A L E				F E M A L E			
	14-19	20-44	45-64	65-70+	14-19	20-44	45-64	65-70+
Finance	0.1	45.8	46.3	7.8	1.2	41.7	48.9	8.2
Owners, managers	-	43.0	53.9	3.1	-	44.0	50.0	6.0
Insurance agents	0.2	52.7	38.8	8.3	1.8	46.8	46.4	5.0
Real estate agents and dealers.	0.2	26.1	57.5	16.2	-	31.5	53.8	14.7
Stock and bond brokers	0.1	48.5	45.3	6.1	-	43.9	51.2	4.9
Other finance occupations ...	2.3	35.4	53.4	8.9	16.7	66.6	16.7	-

Table 64. Years of Schooling for Finance Personnel, 1941

Finance	Years of Schooling							
	M A L E				F E M A L E			
	0-4 p.c.	5-8 p.c.	9-12 p.c.	13 + p.c.	0-4 p.c.	5-8 p.c.	9-12 p.c.	13 + p.c.
Finance	1.2	18.2	59.7	20.9	2.6	16.4	58.3	22.7
Owners, managers	0.2	9.4	68.2	22.2	2.0	70.0	22.0	-
Insurance agents	1.3	22.1	57.5	19.1	1.1	13.0	61.7	24.2
Real estate agents and dealers.	3.3	27.0	52.2	17.5	5.9	24.5	51.3	18.3
Stock and bond brokers	0.7	11.6	58.4	29.3	0.0	17.0	51.2	42.8
Other finance occupations ...	0.4	22.7	51.4	25.5	-	16.6	41.7	41.7

Table 65. Conjugal Condition of Finance Personnel, 1941

	M A L E				F E M A L E			
			Divorced, Separated				Divorced, Separated	
	Single	Married	Widowed		Single	Married	Widowed	
Finance	3,918	25,343	963	352	438	131	194	53
Owners, managers.	676	7,330	189	46	41	4	4	1
Insurance agents.	2,163	11,795	457	156	282	52	87	19
Real estate agents and dealers	540	3,333	218	86	80	69	95	29
Stock and bond brokers	498	2,722	93	56	26	5	6	4
Other finance occupations ...	46	163	6	8	9	1	2	-

8. SERVICE

In the service classification the term service is broadly used to cover the professional, public, recreational, business and personal occupations. The numbers forming this large group have shown an increase census by census although the proportional increase in some cases has been no greater than the increase in total population. Such increase over a period of time is indicative of an advance in the degree of civilization. It reflects, among a number of contributing factors, greater efficiency in production, more leisure time for activity not directly connected with providing the necessities of life, a greater degree of specialization with fewer people trying to do everything for themselves and an extension of the amenities of life for more people. While certain services remain optional or in the luxury class, others gradually become an integral part of the functioning of trade and commerce or of a certain level of living which is generally accepted.

The service group is subdivided into four categories; professional, public, recreational and personal. Many of the professional service occupations require a high degree of education and ability. Recruiting new members into such professions is a highly selective process. Certain of the selective factors are; necessity for making acceptable grades throughout high school and university classes; necessity for financing long years at school; physical requirements in the case of medicine, etc.; and a suitable personality to be accepted to professional status. On the other hand entrance requirements for other professions vary considerably and may be

easy to meet from the standpoint of education, experience, or ability as in some of the public service occupations, or for certain religious workers. Increase in percentage in this group may reflect such factors as an increase in the number of university graduates, a demand for more professional service and a high standard of living.

Requirements for entrance to the public service occupations vary as do duties performed. Relative increase in percentage occupied in public service probably reflects a greater degree of urbanization and more services provided to members of the community.

Percentage employed in providing recreational facilities reflects economic conditions somewhat - leisure time and ready money are requisites. Urbanization is also a factor.

Increase in the relative proportion employed in personal service gives some index of urbanization, level of living and amount of leisure time. It may reflect changes in our way of life such as increased percentage of married women working outside the home, the substitution of laundry, pressing, mending and other services for those performed formerly by maids, and changes in style and such. Some indication of this change is observed in the increased number of beauty parlours and tonsorial establishments.

An increase in this group may be expected in years to come. Increasingly complicated processes in production together with increased demands on the materials to be used and parts made should provide a greater demand for specialists in research and expert technicians. On the other hand increased mechanization with improved equipment will enable fewer and less highly-skilled machine operators to turn out greater quantities at a considerably increased rate per man-hour in the primary and secondary industries. Similarly, transportation has always been a limiting factor in Canada and much engineering is needed yet to improve transportation facilities. The same applies to construction.

The number entering the professions will probably be augmented by many returned personnel who have elected to continue their studies. The majority of these will not be graduated for a few years, and it is as yet too early to know in what numbers of from what courses they will be graduated by the universities.

Those who lack either opportunity or ability to prepare themselves for professional service or do not desire to work with people should find opportunity for research in the social, biological and business fields.

Trend in Selected Service Occupations, 1921 to 1941: x

Trend of selected service occupation groups during the two decades from 1921 to 1941 indicate a considerable increase for many of the service occupations. In order for this increase to represent an increase in popularity or demand it must be greater than the increase of 29 per cent which occurred in Canadian population during that period.

Charts 33 and 34 show selected professional and service groups plotted to give some idea of the present status of the groups and indicate whether they were growing, remaining constant, or declining during the two decades. Occupations which did not increase by that amount were not expanding in relation to increased population but were becoming relatively less important in providing employment opportunities.

x See Occupations and Industries, Bulletin No. O-6, Occupational Trends in Canada, 1901-1941, Dominion Bureau of Statistics.

Years of Schooling for Workers in Service Occupations:

There is considerable variation in the years of schooling possessed by members of service occupations. The professions require a relatively high standard while many public service occupations require little schooling. Nevertheless there is considerable range in years at school for members of such occupations as porters, elevator tenders, waiters, ushers, although on the average it is relatively low. Table 66 gives years of schooling for selected service occupations.

Table 66. Years of Schooling for Workers in Service Occupations

	Years of Schooling							
	M A L E				F E M A L E			
	0-4	5-8	9-12	13+	0-4	5-8	9-12	13+
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Professional	0.3	7.2	26.6	65.9	0.3	6.5	56.3	36.9
Architects	-	5.6	32.6	61.8	-	7.0	18.0	75.0
Artists, art teachers	1.0	20.0	54.2	24.8	0.4	13.5	53.0	33.1
Authors, editors, journalists	0.4	9.7	49.1	40.8	0.3	7.0	50.9	41.8
Chemists, metallurgists	-	7.7	32.2	60.1	-	3.0	37.9	59.1
Clergymen and priests	0.1	3.9	11.7	84.3	-	6.1	29.4	64.5
Dentists	-	1.2	8.1	90.7	-	7.1	35.7	57.1
Draughtsmen, designers	0.3	11.9	59.7	28.1	0.6	12.8	61.8	24.8
Engineers, civil	-	7.3	26.4	66.3	-	-	-	-
Engineers, electrical	-	9.3	32.4	58.3	-	-	-	-
Engineers, mechanical	0.1	16.5	34.3	49.1	-	-	-	-
Engineers, mining	-	4.2	12.8	83.0	-	-	-	-
Judges and magistrates	-	5.7	20.2	74.1	-	-	-	-
Lawyers and notaries	-	0.8	9.0	90.2	-	-	10.9	89.1
Librarians	-	10.7	44.0	45.3	-	5.3	39.9	54.8
Musicians and music teachers	2.4	25.8	52.1	19.7	0.3	11.9	63.1	24.7
Brothers (n.o.s.) nuns (females)	1.4	27.7	29.3	41.6	3.5	30.1	54.7	11.7
Nurses - graduates	0.6	11.8	56.9	30.7	0.1	6.3	60.2	33.4
Nurses in training	1.4	5.5	54.8	38.3	0.1	1.8	62.8	35.3
Osteopaths and chiropractors	-	8.0	28.3	63.7	-	11.0	37.0	52.0
Physicians and surgeons	-	-	4.4	95.6	-	0.3	11.6	88.1
Professors and college principals ..	-	1.4	10.0	88.6	0.4	3.3	20.0	76.3
Religious workers, n.e.s.	2.8	23.3	36.6	37.3	1.6	23.5	51.0	23.9
Social welfare workers, n.e.s.	1.7	24.6	46.6	27.1	0.8	8.4	44.7	46.1
Teachers - school	0.1	2.8	29.7	67.4	0.1	3.5	55.6	40.8
Veterinary surgeons	-	8.6	25.7	65.7	-	-	-	-
Other professional occupations	1.3	14.2	38.9	45.6	0.6	8.9	42.8	47.7
Public	3.5	38.0	46.0	12.5	2.1	31.7	57.1	9.1
Firemen, fire department	4.6	54.5	37.1	3.8	-	-	-	-
Policemen and detectives	3.8	40.6	47.3	8.3	0.9	15.5	69.1	14.5
Postmasters and postmistresses(female)	4.7	36.4	49.9	9.0	2.4	35.0	57.4	5.2
Postmen and mail carriers	4.5	50.0	40.2	5.3	2.0	57.0	39.0	2.0
Public service officials	1.2	19.8	51.5	27.5	0.4	5.1	55.6	38.9
Other public occupations	8.5	50.7	35.6	5.2	-	-	100.0	-
Recreational	6.6	39.5	45.5	8.4	2.9	30.4	58.4	8.3
Owners, managers	8.2	37.2	44.0	10.6	10.2	35.2	42.1	12.5
Actors, sportsmen	5.1	38.5	47.6	8.8	2.2	30.4	54.8	12.6
Motion picture projectionists	3.7	38.0	50.0	8.3	-	-	80.0	20.0
Ushers	3.6	44.6	48.7	3.1	0.4	26.0	70.8	2.8
Other recreational occupations	11.9	49.4	35.1	3.6	5.6	37.1	49.6	7.7
Personal	14.0	51.0	31.2	3.8	7.6	53.8	36.0	2.6
Owners, managers - hotels	9.7	40.3	40.4	9.6	5.4	38.6	48.2	7.8
Owners, managers - laundries	23.8	34.5	35.3	6.4	6.0	32.1	55.9	6.0

Table 66. Years of Schooling for Workers in Service Occupations - Concluded.

	Years of Schooling							
	M A L E				F E M A L E			
	0-4	5-8	9-12	13+	0-4	5-8	9-12	13+
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Owners, managers - restaurants	18.2	47.6	29.5	4.7	9.2	45.4	40.3	5.1
Barbers, hairdressers	9.8	58.5	29.6	2.1	1.7	33.8	60.6	3.9
Bootblacks	28.0	53.1	18.0	0.9	-	-	-	-
Charworkers and cleaners	16.4	54.5	27.4	1.7	17.7	56.6	24.2	1.5
Cleaners and dyers	8.4	48.4	38.8	4.4	4.4	47.5	46.1	2.0
Cooks	22.4	52.9	22.2	2.5	8.8	53.8	34.7	2.7
Domestic servants	20.1	52.0	25.6	2.3	7.5	59.4	31.6	1.5
Elevator tenders	6.7	50.5	39.4	3.4	2.1	30.2	62.3	5.4
Guards and caretakers, n.e.s.	12.2	54.6	29.9	3.3	-	51.2	44.2	5.6
Housekeepers, stewards (matrons) ...	4.0	41.3	46.4	8.3	9.6	52.3	34.3	3.8
Janitors and sextons	10.5	54.9	31.6	3.0	9.8	50.9	36.1	3.2
Laundrymen (Laundresses)	38.9	41.1	18.0	2.0	8.2	51.6	38.8	1.4
Lodging housekeepers	15.4	48.0	30.0	6.6	12.1	48.3	34.6	5.0
Nurses - practical	5.1	44.9	42.0	8.0	1.9	37.0	54.5	6.6
Porters	7.1	50.0	38.3	4.6	4.1	33.3	53.0	9.6
Undertakers	2.7	30.2	54.2	12.9	1.7	30.4	63.9	14.0
Waiters (Waitresses)	11.0	50.6	34.8	3.6	3.1	46.6	48.0	2.3
Other personal occupations	3.3	43.6	46.6	6.5	2.5	29.1	57.1	11.3

Conjugal Condition of Those in Service Occupations:

The relative number, married and single, varies considerably from clerical group to clerical group. Distribution of ages in the groups should be kept in mind in interpreting the numbers. These are summarized in Table 67.

Table 67. Conjugal Condition of Those in Service Occupations

	M A L E				F E M A L E			
	Single	Mar- ried	Wid- owed	Div- orced, Separ- ated	Single	Mar- ried	Wid- owed	Div- orced, Separ- ated
Service	88,104	213,844	9,870	4,471	328,502	43,286	31,592	14,713
Professional	41,635	73,581	2,318	877	116,662	5,872	2,911	996
Architects	211	926	42	7	14	1	-	1
Artists and art teachers ...	887	1,355	54	31	820	95	20	19
Authors, editors, journalists.	983	2,306	83	62	539	94	61	19
Chemists and metallurgists .	2,712	4,371	104	46	242	12	5	5
Clergymen and priests	7,356	6,496	210	15	24	2	5	-
Dentists	468	3,084	97	46	34	5	5	1
Draughtsmen and designers ..	2,470	3,012	71	43	139	11	5	2
Engineers, civil	1,197	5,289	182	53	-	-	-	-
Engineers, electrical	1,011	3,421	76	49	-	-	-	-
Engineers, mechanical	955	3,425	101	37	-	-	-	-
Engineers, mining	776	1,905	54	16	-	-	-	-
Judges and magistrates ...	28	409	39	1	-	-	-	-
Lawyers and notaries	1,575	5,851	278	86	92	28	6	3
Librarians	56	161	7	2	1,181	57	78	14

Table 67. Conjugal Condition of Those in Service Occupations - Concluded.

	M A L E				F E M A L E			
	Single	Mar- ried	Wid- owed	Div- orced, Separ- ated	Single	Mar- ried	Wid- owed	Div- orced, Separ- ated
Musicians and music teachers.	1,469	2,237	89	95	3,397	331	200	96
Brothers, n.o.s.	1,430	-	1	-	7,472	-	8	-
Nurses, graduate	63	77	10	3	23,785	1,275	1,041	370
Nurses in training	67	5	1	-	11,767	21	16	6
Osteopaths and chiropractors.	61	367	22	17	51	30	15	5
Physicians and surgeons ...	1,705	8,229	320	85	241	120	16	7
Professors, college principals	2,397	1,417	32	11	254	12	9	2
Religious workers, n.e.s. ...	621	756	26	4	1,823	133	65	14
Social Welfare Workers, n.e.s.	102	396	16	4	1,019	93	108	31
Teachers, school	10,093	11,669	167	59	59,902	3,194	1,055	312
Veterinary surgeons	187	794	51	18	-	-	-	-
Other professional occupations	2,755	5,623	185	87	3,865	358	193	89
Public	6,314	37,222	1,541	439	-	-	-	-
Firemen, fire department ...	501	4,272	130	72	1,090	571	513	47
Policemen and detectives ...	2,877	12,542	386	155	45	22	35	8
Postmasters	352	2,646	185	22	843	488	415	23
Postmen and mail carriers ..	1,294	5,661	295	60	34	35	27	4
Public service officials ...	1,167	10,774	456	103	-	-	-	-
Other public occupations ...	123	1,327	89	27	164	24	34	12
Recreational	2,713	4,605	189	145	4	2	2	-
Owners, managers	732	2,443	106	67	521	125	89	59
Actors, sportsmen	492	704	34	39	24	30	33	1
Motion picture projectionists	385	1,091	26	28	183	55	11	21
Ushers	660	164	7	4	3	1	1	-
Other recreational occupations	444	203	16	7	268	10	3	7
Personal	37,442	98,436	5,822	3,010	43	29	41	30
Owners, managers-hotels ...	735	4,871	231	107	210,229	36,718	28,079	13,611
Owners, managers-laundries ..	136	968	28	41	164	320	416	70
Owners, managers-restaurants.	1,934	8,412	298	215	63	39	23	9
Barbers, hairdressers	2,621	11,474	506	287	769	800	466	177
Bootblacks	405	328	24	24	7,538	2,496	462	502
Charworkers and cleaners ...	816	1,480	92	66	895	882	1,767	556
Cleaners and dyers	1,087	2,032	74	57	1,003	261	69	68
Cooks	5,381	11,450	570	443	6,476	1,777	1,099	567
Domestic servants, n.e.s. ...	4,161	2,886	287	175	132,783	7,012	5,608	3,591
Elevator tenders	1,141	1,993	129	46	543	39	11	24
Guards and caretakers, n.e.s.	3,420	15,772	1,293	330	6	9	20	8
Housekeepers, stewards, matrons	618	1,880	110	56	25,466	6,085	9,996	4,703
Janitors and sextons	2,883	14,836	1,171	329	238	462	380	126
Laundrymen, Laundresses ...	1,285	4,066	120	173	5,491	1,250	460	356
Lodging housekeepers	316	1,637	179	76	2,166	12,130	5,492	1,323
Nurses, practical	1,510	1,575	110	59	5,818	606	1,195	354
Porters	1,939	2,676	159	121	213	2	3	1
Undertakers	465	1,554	71	21	14	4	17	1
Waiters	5,949	7,099	326	359	18,959	2,368	497	1,120
Other personal occupations ..	640	1,447	44	25	1,624	176	98	55

Earnings and Weeks Employed for Service Occupations:

Average earnings are given for 1941 for those employed in service occupations. In the professions the employees represent not only the smaller part of those in many professions but in most instances salaries received are less than the amount earned by those who receive fees for services rendered. Table 68 gives the number of wage-earners, male and female, their average earnings and weeks employed. For 1931 it gives the number of males losing time and the average number of weeks lost by members of the occupation.

Table 68. Wage-earners in Service Showing Average Earnings and Average Weeks Employed for Year Ending June 2, 1941.

	MALES			FEMALES			MALES		FEMALES		
	Male wage-earners	Average earnings	Average weeks employed	Female wage-earners	Average earnings	Average weeks employed	Males losing time	Average weeks lost ^x	Females losing time	Average weeks lost ^x	
		\$			\$						
Professional	81,181	1,755	47.98	89,348	741	45.34	-	-	-	-	
Architects	658	2,246	47.87	15	767	43.08	107	3.71	-	-	
Artists, art teachers	1,491	1,448	44.36	541	671	37.70	359	6.88	129	9.10	
Authors, editors, journalists	2,911	1,912	48.29	528	1,006	45.71	249	2.38	36	1.84	
Chemists, metallurgists	7,035	1,612	46.94	192	1,041	45.89	443	2.92	12	4.05	
Clergymen, priests	8,119	1,140	50.08	16	640	40.93	139	0.28	-	-	
Dentists	191	1,998	46.29	19	947	42.21	26	2.55	1	5.71	
Draughtsmen	5,493	1,446	46.64	148	735	41.27	1,089	4.93	26	4.19	
Engineers, civil	6,152	2,405	47.22	-	-	-	1,313	4.56	-	-	
Engineers, electrical	4,442	2,363	48.72	-	-	-	536	2.97	-	-	
Engineers, mechanical	4,347	2,232	47.32	-	-	-	670	5.66	-	-	
Engineers, mining	2,520	2,541	46.50	-	-	-	252	5.50	-	-	
Judges, magistrates	477	5,369	51.30	-	-	-	4	0.22	-	-	
Lawyers, notaries	1,276	2,833	49.69	51	1,510	47.13	39	1.00	-	-	
Librarians	221	1,790	49.45	1,275	999	48.07	10	1.04	45	1.17	
Musicians, music teachers	2,333	1,005	40.40	1,467	528	42.35	986	11.86	169	3.63	
Nurses, graduate	150	865	44.38	21,021	702	38.54	-	-	2,094	4.79	
Nurses in training	54	381	43.75	5,365	174	44.44	-	-	571	0.99	
Osteopaths, chiropractors	20	1,232	39.79	15	1,064	46.14	2	5.42	1	13.00	
Physicians, surgeons	1,685	2,813	46.65	142	1,272	44.06	32	0.33	1	0.15	
Professors, college principals	2,480	2,198	50.36	181	1,833	48.46	30	0.30	13	1.32	
Religious workers, n.e.s.	812	1,072	48.23	888	605	45.30	39	0.66	43	1.47	
Social Welfare workers	498	1,473	47.45	959	1,045	46.46	39	2.53	60	1.99	
Teachers, school	19,791	1,416	49.42	53,127	793	48.25	1,031	1.53	4,065	1.91	
Veterinary surgeons	379	1,971	48.42	-	-	-	8	0.66	-	-	
Other professional occupations	7,648	1,787	47.01	3,399	845	43.87	414	2.74	105	2.65	
Public	45,447	1,512	49.46	2,218	645	48.78	-	-	-	-	
Firemen, fire department	4,975	1,592	50.50	-	-	-	275	1.02	-	-	
Policemen, detectives	15,887	1,580	48.66	107	939	44.77	833	1.48	9	2.38	
Postmasters	3,205	1,171	50.75	1,769	502	49.21	-	-	-	-	
Postmen, mail carriers	7,310	1,000	49.60	100	586	49.13	-	-	-	-	
Public service officials	12,502	2,055	49.91	234	1,563	47.50	544	1.11	11	2.24	
Other public occupations	1,566	1,313	47.39	8	657	42.57	304	3.54	-	-	
Recreational	5,547	1,264	42.47	612	461	34.81	-	-	-	-	
Managers	1,642	1,836	47.84	30	1,204	43.39	138	4.78	5	6.17	
Actors, sportsmen	942	1,156	34.18	202	553	29.48	223	7.42	1	0.04	
Motion picture projectionists	1,522	1,477	48.07	5	425	44.25	360	5.66	-	-	
Ushers	832	473	38.51	11	218	36.18	175	8.41	78	7.70	
Personal	111,054	737	42.44	233,202	233	37.89	-	-	-	-	
Managers, hotels	1,656	1,528	47.76	149	801	45.50	122	2.94	10	2.75	
Managers, laundries	326	2,023	50.24	87	758	45.40	-	-	-	-	
Managers, restaurants	1,235	1,175	47.35	300	640	44.12	124	3.07	26	2.55	
Barbers, hairdressers	4,638	761	43.54	5,580	486	59.25	1,857	6.90	823	6.21	
Bootblacks	483	382	37.98	-	-	-	261	10.96	-	-	
Charworkers, cleaners	2,102	645	39.55	4,003	358	41.83	137	4.84	1,091	6.81	
Cleaners, dyers	2,412	793	41.77	1,339	451	38.75	396	8.48	123	7.49	
Cooks	17,611	635	38.27	8,305	364	40.52	7,971	11.79	1,583	4.94	
Domestic servants	7,230	390	35.28	139,630	176	36.67	2,433	7.41	27,213	5.00	
Elevator tenders	3,309	764	43.86	611	482	40.31	848	6.08	122	5.44	
Guards, caretakers	20,699	856	43.86	43	519	44.52	3,666	5.72	15	3.98	
Housekeepers, stewards	2,604	1,019	44.80	39,094	236	41.99	159	3.63	3,176	3.40	
Janitors, sextons	18,876	761	46.58	4,063	415	46.14	2,423	3.46	115	2.44	
Laundry workers	3,432	599	42.41	6,801	406	40.09	-	-	-	-	
Nurses, practical	3,180	690	43.28	5,873	375	35.41	422	4.71	1,196	8.29	
Porters	4,848	694	42.72	60	293	44.50	1,032	7.33	1	1.63	
Undertakers	928	1,140	47.54	12	567	42.33	90	3.39	1	12.00	
Waiters, waitresses	13,484	650	40.71	22,483	303	36.01	3,768	7.86	4,610	7.80	
Other professional occupations	2,001	884	46.13	1,769	477	42.79	723	5.74	1,377	5.78	

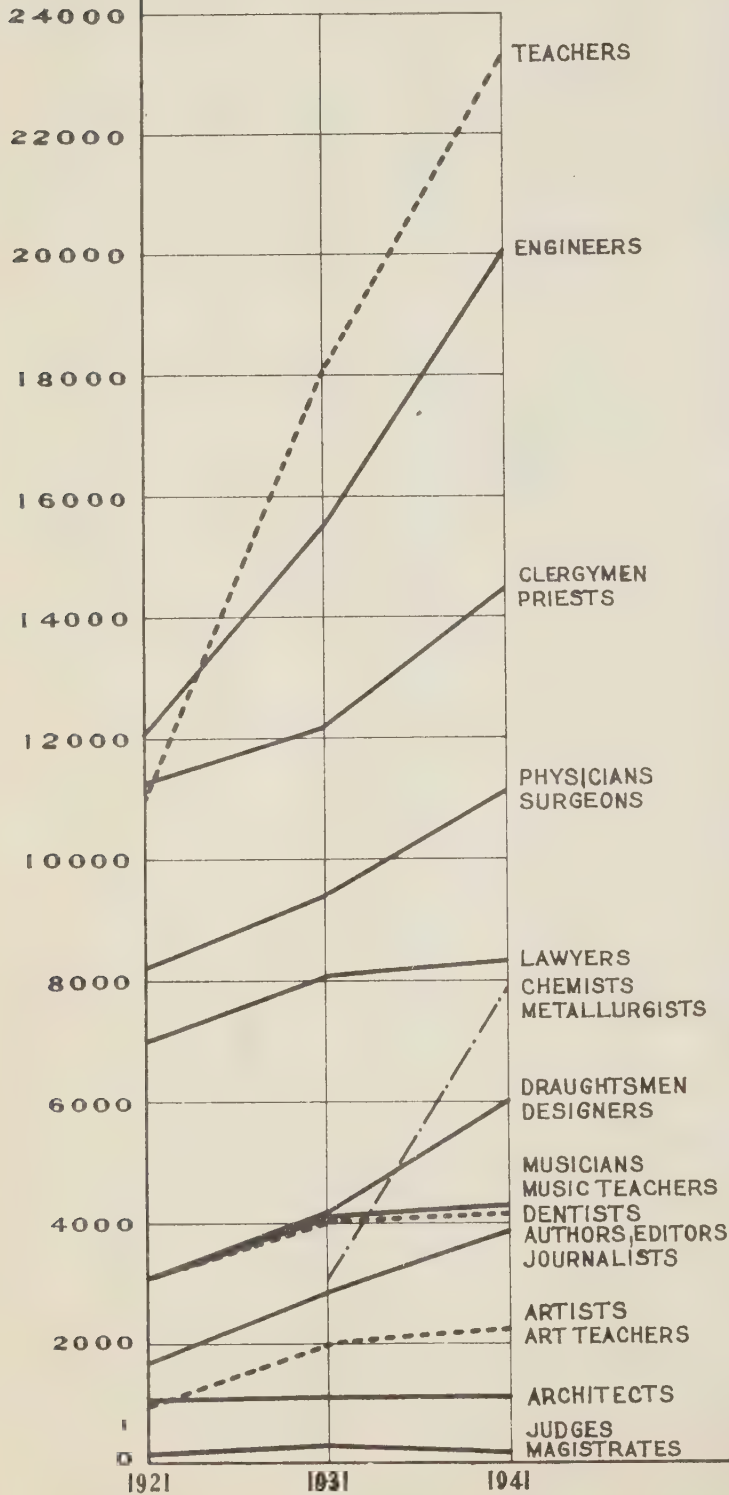
^x Average weeks lost is computed by dividing the number of weeks lost by the number of wage-earners. Not to be confused with average weeks lost by those losing time which would be considerably higher.

Chart 33

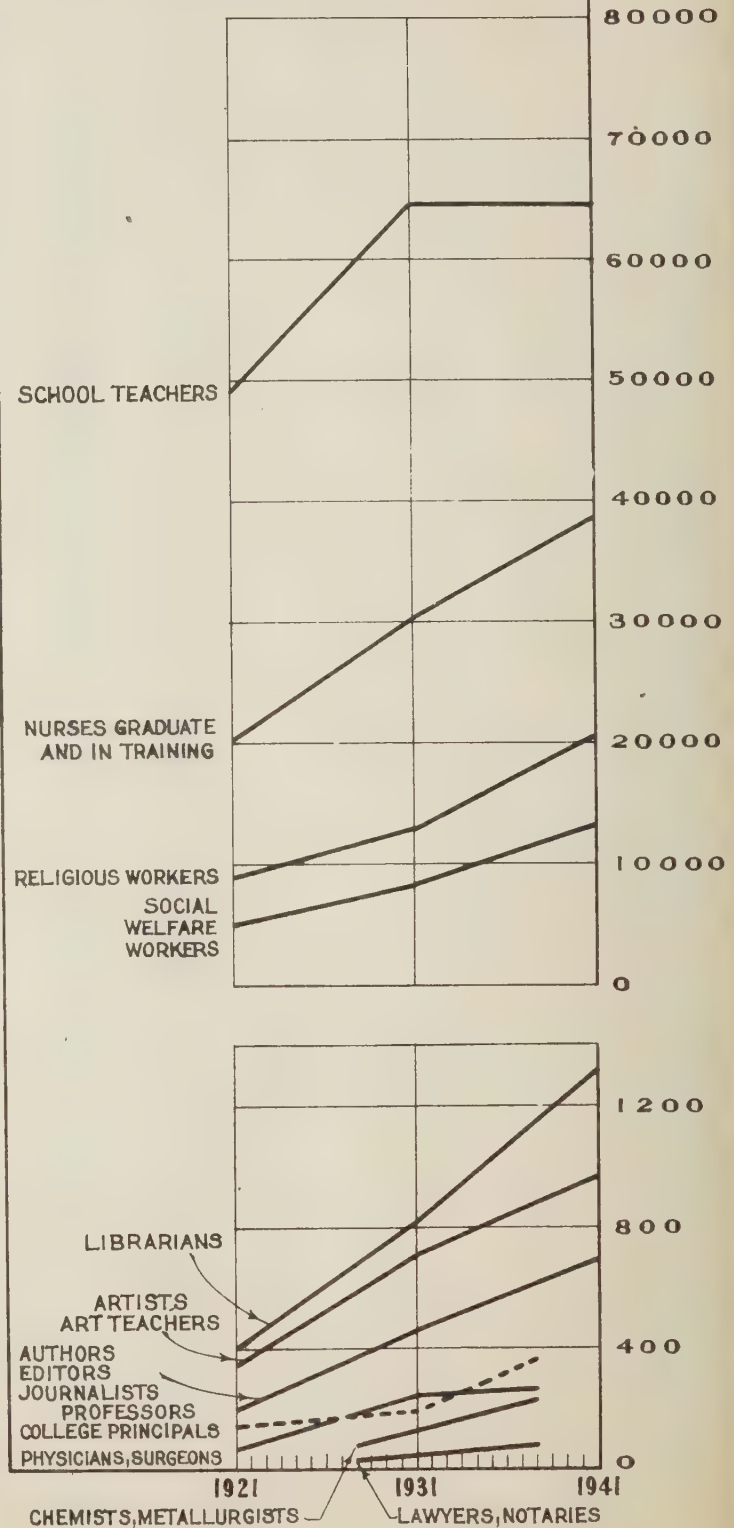
WORKERS IN SELECTED PROFESSIONAL GROUPS

1921, 1931, 1941

MALES



FEMALES



Percentages of Males and Females in Service
Occupations Distributed in Selected Age Groups:

Considerable age range is shown for those in service occupations. (Table 69)
In certain of these, such as nursing, minimum age for entering training is set by the institution; in others such as many of the professional groups the minimum age is determined largely by the years of preparation required before entrance to practice. In several professions such as engineering, veterinary surgeon, etc. there are few or no women.

Table 69. Percentage of Males and Females Gainfully Occupied in Service Occupations Distributed According to Selected Age groups from 14 Up.

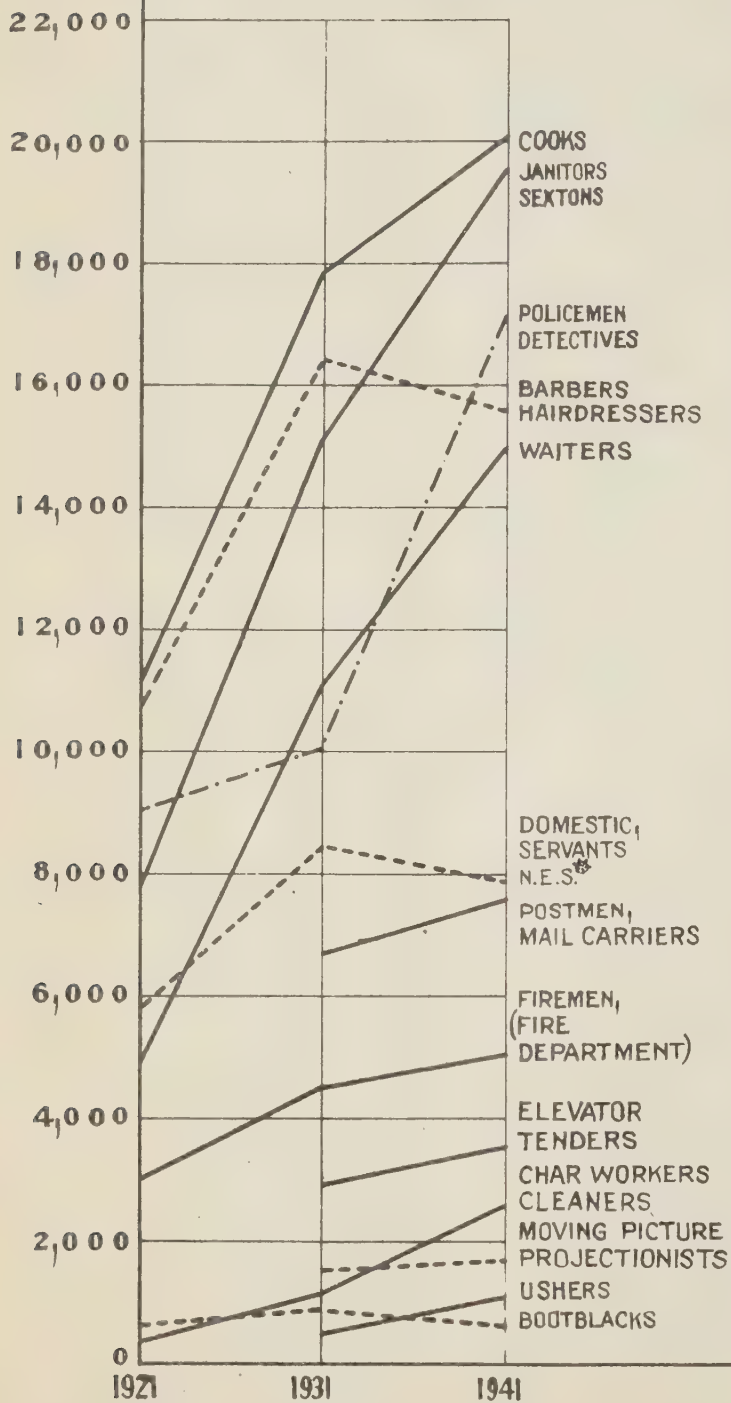
Service	M A L E S				F E M A L E S			
	14-19	20-44	45-64	65-70+	14-19	20-44	45-64	65-70+
Professional	1.5	61.9	31.0	5.6	4.0	76.8	16.8	2.4
Architects	-	41.2	50.4	8.4	-	81.2	18.8	-
Artists and art teachers	3.7	66.0	25.3	5.0	7.0	72.0	16.7	4.3
Authors, editors, journalists ..	1.5	60.9	32.1	5.5	2.0	62.0	31.0	5.0
Chemists and metallurgists ...	1.0	79.2	18.1	1.7	1.5	75.4	19.3	3.8
Clergymen and priests	-	49.9	39.6	10.5	-	71.0	19.4	8.6
Dentists	-	48.7	43.3	8.0	-	68.9	31.1	-
Draughtsmen and designers	10.6	67.7	20.5	1.2	14.0	72.6	12.8	0.6
Engineers, civil	-	46.6	49.0	4.4	-	-	-	-
Engineers, electrical	-	68.1	29.9	2.0	-	-	-	-
Engineers, mechanical	0.1	62.2	34.2	3.5	-	-	-	-
Engineers, mining	-	72.2	24.8	3.0	-	-	-	-
Judges and magistrates	-	6.9	49.9	43.2	-	-	-	-
Lawyers and notaries	-	49.2	41.1	9.7	-	69.8	27.9	2.3
Librarians	0.5	45.1	41.6	12.8	0.7	67.4	26.7	5.2
Musicians and music teachers ..	2.0	66.0	26.7	5.3	2.9	66.4	26.4	4.3
Brothers, n.o.s.	9.5	69.0	15.9	5.4	1.6	56.7	30.7	11.0
Nurses, graduate	-	69.3	26.1	4.6	-	78.8	19.2	2.0
Nurses in training	21.9	75.3	3.8	-	16.7	83.2	0.1	-
Osteopaths and chiropractors ..	-	35.3	54.6	10.1	-	30.7	55.4	13.9
Physicians and surgeons	-	51.3	37.7	11.0	-	69.0	25.8	5.2
Professors, college principals .	-	68.9	26.6	0.5	-	57.8	37.5	4.7
Religious workers, n.e.s.	1.0	61.0	29.9	8.1	1.5	61.3	31.6	5.1
Social Welfare Workers, n.e.s. .	0.9	43.4	48.6	7.1	1.0	63.4	30.5	5.1
Teachers, school	1.3	78.4	18.5	1.8	4.0	79.5	15.1	1.4
Veterinary surgeons	-	35.8	49.0	15.2	-	-	-	-
Other professional occupations .	5.0	60.7	30.5	4.8	3.8	73.3	19.8	3.1
Public	0.5	47.0	46.3	6.2	3.0	48.1	37.7	11.2
Firemen, fire deaprtment	0.0	58.1	40.8	1.1	-	-	-	-
Policemen and detectives	0.3	60.4	36.3	3.0	2.7	61.8	33.7	1.8
Postmasters	0.2	24.0	57.4	18.4	3.0	47.1	36.6	13.3
Postmen and mail carriers	1.6	44.7	46.4	7.3	8.0	57.0	34.0	1.0
Public Service officials	0.1	35.6	56.3	8.0	0.9	44.4	50.0	4.7
Other public occupations	0.9	26.8	61.8	10.5	-	62.5	37.5	-
Recreational	7.7	58.2	30.6	3.5	18.4	63.1	16.9	1.6
Owners, managers	0.6	53.2	41.0	5.2	5.6	42.1	52.3	-
Actors, sportsmen	4.3	65.3	26.5	3.9	17.8	74.8	6.3	1.1
Motion picture projectionists ..	20.2	69.6	27.6	2.6	-	80.0	20.0	-
Ushers	37.6	54.7	6.8	0.7	32.7	66.3	1.0	-
Other recreational occupations .	25.3	48.4	23.0	3.3	2.1	46.9	46.9	4.1

Chart 34

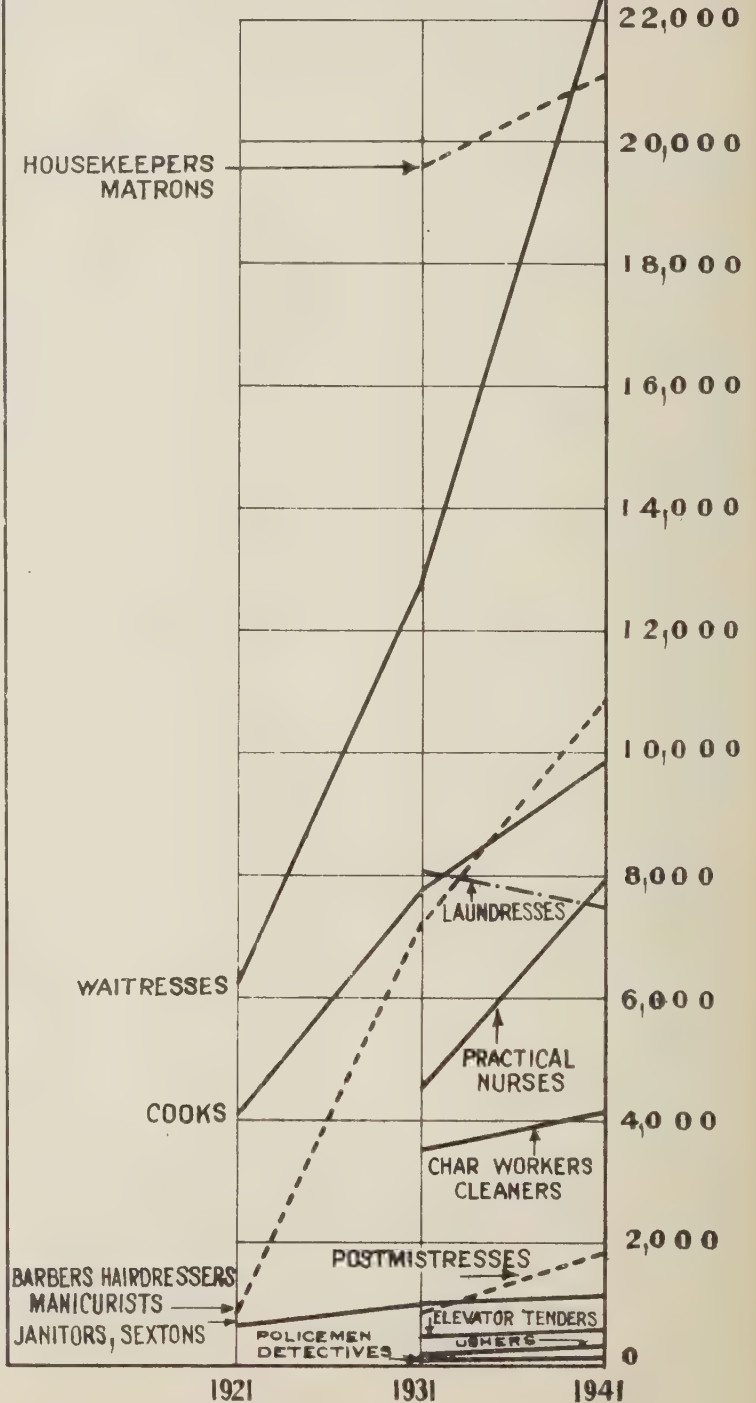
WORKERS IN SELECTED PUBLIC AND PERSONAL SERVICE OCCUPATIONS, CANADA

1921, 1931, 1941

MALES



FEMALES



N.E.S.* not elsewhere specified.

Table 69. Percentage of Males and Females Gainfully Occupied in Service Occupations Distributed According to Selected Age Groups from 14 Up - Concluded

Service	M A L E S				F E M A L E S			
	14-19	20-44	45-64	65-70+	14-19	20-44	45-64	65-70+
Personal	3.8	45.7	43.2	7.3	22.0	56.8	17.5	3.7
Owners, managers - hotels	0.1	37.0	51.9	11.0	0.1	30.5	54.5	14.9
Owners, managers - laundries ..	-	42.8	50.6	6.6	2.2	65.0	29.1	3.7
Owners, managers - restaurants .	0.5	52.1	43.4	4.0	1.7	58.4	35.9	4.0
Barbers, hairdressers	1.1	56.2	38.1	4.6	10.4	82.1	7.3	0.2
Bootblacks	1.8	49.8	30.2	8.2	-	-	-	-
Charworkers and cleaners	7.0	50.6	37.9	4.5	2.4	38.1	52.7	6.8
Cleaners and dyers	9.1	63.5	24.7	2.7	19.8	70.7	8.9	0.6
Cooks	3.3	48.2	44.3	4.2	6.0	65.0	26.4	2.6
Domestic servants, n.e.s.	18.3	45.2	32.2	4.3	33.0	57.5	8.1	1.3
Elevator tenders	10.5	45.3	36.5	7.7	20.3	75.0	4.2	0.5
Guards and caretakers, n.e.s. ..	0.1	33.2	52.6	13.1	3.8	49.1	45.3	2.8
Housekeepers and stewards	2.3	42.4	50.8	4.5	7.3	49.8	34.2	8.7
Janitors and sextons	1.1	30.3	53.8	14.8	3.0	39.3	48.7	9.0
Laundrymen	5.5	34.3	54.0	6.2	19.1	67.0	12.3	1.6
Lodging house keepers	0.0	26.0	58.1	15.9	0.3	35.5	49.4	14.8
Nurses, practical	5.3	58.1	34.1	2.5	5.8	54.7	32.9	6.6
Porters	10.0	51.1	35.4	3.5	5.0	41.6	38.8	14.6
Undertakers	1.5	56.2	33.3	9.0	-	-	-	-
Waiters	6.7	65.6	26.1	1.6	26.8	70.1	2.9	0.2
Other personal occupations ...	-	-	-	-	14.3	72.3	11.8	1.6

9. CLERICAL

The clerical group is made up of accountants and auditors, bookkeepers and cashiers, office appliance operators, office clerks, shipping clerks and stenographers and typists. For the most part these people are known as office workers. Their number has been increasing rapidly according to census data for both females and males. United States census figures from 1900 to 1930 show a more rapid rise for females in clerical positions than in any other classification and the increase for males so employed is second only to trade for the same period.

Increase in this group has paralleled increase in business expansions and reflects greater specialization of function. Further increase in numbers is dependent to a great extent on further expansion and increase in business organization and enterprise; and the necessity for bookkeeping, etc., which is a function of sales and collection procedure, statistical forms required, research, advertising, etc. Well established, stable firms would seem to have their business well organized and maintain a competent staff year after year.

Members of the clerical group are employed in a wide range of industrial organizations practically as extensive as the range of industries itself. The number of males and females employed in various clerical positions in Canadian industries, 1931, may be discovered from the bulletin "Distribution of Occupations by Industry," King's Printer, 1938.

Preparation for employment in this group varies considerably. Bookkeepers and accountants may have graduated from business college or university or have picked up what they know on the job. The same is true of most other members of this group. On the whole, however, the members are somewhat above average in

education and preparation as may be noticed from the number of years schooling, (Table 71). Their age range is given in Table 70, average earnings and weeks employed, Table 72, and number out of work June 1, 1931 in Table 73.

Table 70. Percentages 14 Years and Over in Selected "Clerical" Occupations

Clerical	M A L E				F E M A L E			
	14-19	20-44	45-64	65-70+	14-19	20-44	54-64	65-70+
Clerical	9.2	63.6	25.0	2.2	14.3	76.8	8.6	0.3
Accountants and auditors	1.3	64.3	31.4	3.0	6.3	70.6	22.0	1.1
Bookkeepers and cashiers ...	5.8	69.2	22.0	3.0	10.7	77.6	11.3	0.4
Office appliance operators ..	10.4	69.8	17.8	2.0	15.0	81.5	3.4	0.1
Office clerks	11.4	62.5	24.1	2.0	14.8	73.0	11.7	0.5
Shipping clerks	10.5	63.6	23.5	2.4	28.7	68.2	3.1	-
Stenographers and typists ..	18.7	72.7	8.0	0.6	15.0	79.3	5.6	0.1

Table 71. Years of Schooling for "Clerical" Occupations

	M A L E				F E M A L E			
	0-4	5-8	9-12	13+	0-4	5-8	9-12	13+
Clerical	1.1	21.4	61.8	15.7	0.2	9.8	72.0	18.0
Accountants and auditors	0.2	9.6	63.4	26.8	0.1	11.3	70.6	18.0
Bookkeepers and cashiers	0.5	14.0	68.4	17.1	0.2	13.0	72.0	14.8
Office appliance operators ...	1.4	24.6	60.3	13.7	0.1	10.5	74.4	15.0
Office clerks	1.0	21.7	62.9	14.4	0.4	13.5	68.6	17.5
Shipping clerks	3.6	42.3	48.9	5.2	2.6	34.9	58.3	4.2
Stenographers and typists	0.4	10.0	69.9	19.7	0.1	6.2	74.3	19.4

Table 72. Wage-earners in "Clerical" Occupations Showing Average Earnings and Average Weeks Employed for Year Ending June 2, 1941.

	M A L E			F E M A L E			M. & F.
	Wage- earn- ers	Aver- age earn- ings	Aver- age weeks em- ployed	Wage- earn- ers	Aver- age earn- ings	Aver- age weeks em- ployed	
		\$			\$		Absent on date of census
Clerical	180,446	1,218	44.66	153,696	736	44.32	
Accountants, auditors	29,595	1,750	48.92	2,848	958	46.84	1,220
Bookkeepers, cashiers	14,499	1,126	46.60	20,580	739	45.37	1,521
Office appliance operators .	362	1,103	46.77	2,630	771	43.93	108
Office clerks	107,674	1,151	46.40	49,219	745	44.15	5,299
Shipping clerks	23,017	964	45.36	936	513	41.14	865
Stenographers and typists ..	3,299	912	44.46	77,483	723	44.11	3,426

Table 73. Wage-earners in Clerical Occupations Showing Number Out of Work and Number of Weeks Lost for Year Ending June 1, 1931.

	M A L E S			F E M A L E S		
	Male wage- earn- ers	Males losing time	Weeks lost by males losing time	Female wage- earn- ers	Females losing time	Weeks lost by females losing time
Clerical	123,749	22,295	4.0	116,133	20,219	3.8
Bookkeepers and cashiers..	29,482	5,641	4.5	21,201	3,566	3.4
Office appliance operators	235	49	4.5	1,502	316	4.5
Stenographers, typists ..	3,507	773	5.5	64,655	12,062	4.4
Other clerical	1,122	493	11.7	280	118	9.4
Accountants, auditors ...	15,448	1,843	3.3	555	39	2.2

APPENDIX I

OCCUPATIONS INCLUDED IN THE SOCIAL-ECONOMIC GROUPS

1. Professional

Architects; artists, art teachers; authors, editors, journalists; chemists and metallurgists; clergymen and priests; dentists; draftsmen and designers; engineers, civil, electrical, mechanical and mining; judges and magistrates; lawyers and notaries; librarians; musicians and music teachers; brothers, nuns; graduate nurses, nurses-in-training; osteopaths and chiropractors; physicians and surgeons; professors and college principals; religious workers; social welfare workers; school teachers; veterinary surgeons; actors and sportsmen and "other professional occupations".

2. Proprietors, Managers, Officials

Farmers and stockraisers; logging owners and managers, foresters and timber cruisers; owners and managers in mining and quarrying, manufacturing, construction, transportation, retail and wholesale, finance, hotels, laundries, restaurants, etc. Train conductors and dispatchers, brokers and agents, stock and bond brokers, postmasters, public service officials, and undertakers.

3. Clerks and Kindred Workers

Inspectors, chemical, metal, wood, and manufacturing; Construction and transportation inspectors; gaugers, ticket agents, baggagemen and expressmen; messengers; telegraph and telephone operators; advertising agents, bill collectors, commercial travellers, credit men, hawkers and peddlers; newsboys; packing agents; canvassers and demonstrators; sales people in stores; insurance agents, real estate agents and dealers; postmen and mail carriers; other trade, finance and public occupations; accountants and auditors, bookkeepers and cashiers, office appliance operators, office clerks, shipping clerks, stenographers and typists.

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4. Skilled Workers and Foremen

Foremen, farm, log and timber camp, mining and quarrying, manufacturing, construction; blacksmiths and forgemen; boilermakers, platers and rivetters; bookbinders; shoe repairers; cabinet and furniture makers; loom fixers; machinists; mechanics and repairmen; millers; milliners; millwrights; molders, coremakers and casters; sheet metal workers; stationary enginemen; stone cutters; wood sawyers; tailoresses and tailors; tool makers and die cutters; welders; brick and stone masons; carpenters; electricians and wiremen; painters, decorators and glaziers; plasterers and lathers; plumbers; and structural iron workers.

5. Semi-skilled Workers

Oil well drillers; bakers; bleachers and dyers; boiler firemen; butchers and meat cutters; sewers (dressmakers); filers and grinders; fitters and assemblers in metal; polishers and buffers in metal; power station operators; upholsterers; spinners and twistors; weavers; wood turners; selected construction operators; brakemen; chauffeurs and taxi drivers; deliverymen and drivers; firemen and trimmers on ships; linemen and cablemen; lock keepers, canalmen and boatmen; seamen; electric railway operators; switchmen and signalmen; truck drivers; yardmen; packers and wrappers; firemen; motion picture projectionists; barbers, hairdressers; cleaners and dyers; practical nurses; policemen and detectives and other transportation workers.

6. Unskilled Workers

Farm labourers; fishermen; hunters, trappers and guides; lumbermen; labourers in mines and quarries; miners and millmen; quarriers and rock drillers; furnacemen, heat treaters and annealers; longshoremen and stevedores; sectionmen and trackmen; teamsters and carriage drivers; selected recreation occupations; bootblacks; charworkers and cleaners; cooks; domestic servants; elevator tenders; guards, caretakers, housekeepers, matrons and stewards; janitors and sextons; laundry workers; lodging housekeepers; porters; waitors and waitresses; other personal occupations; ushers; labourers, not given elsewhere.

B. Bros. 1905

